

Solar Energy Materials & Solar Cells 75 (2003) 787-805

www.elsevier.com/locate/solmat

## Author index to volumes 74 + 75

Aberle, A.G., see Altermatt, P.P.	(74) 165
Aberle, A.G., see Cho, EC.	(74) 147
Aberle, A.G., see Neuhaus, D.H.	(74) 225
Aberle, A.G., see Widenborg, P.	(74) 305
Abou El-Zahab, E.M., see Nafeh, Abd El-Shafy A.	(75) 723
Adurodija, F., see Aramoto, T.	(75) 211
Ahn, BT., see Ahn, J.H.	(74) 315
Ahn, B.T., see Lee, D.Y.	(75) 73
Ahn, B.T., see Yun, J.H.	(75) 203
Ahn, H., see Heo, J.	(75) 193
Ahn, J.H., J.H. Eom, K.H. Yoon and BT. Ahn, Low-temperature crystallization of amorphous	
Si films using AlCl <sub>3</sub> vapor	(74) 315
Airey, R., see Bushnell, D.B.	(75) 299
Allebe, C., see Szlufcik, J.	(74) 155
Altermatt, P., see Maddalena, P.	(75) 397
Altermatt, P.P., A.G. Aberle, J. Zhao, A. Wang and G. Heiser, A numerical model of p-n	
junctions bordering on surfaces	(74) 165
Altermatt, P.P., see Parretta, A.	(75) 387
Altermatt, P.P., see Parretta, A.	(75) 497
Andrä, G., see Sinh, N.D.	(74) 295
Aoyama, K., see Fujita, R.	(75) 319
Arai, E., see Takeuchi, K.	(75) 427
Araki, I., see Uematsu, T.	(75) 557
Araki, K. and M. Yamaguchi, Novel equivalent circuit model and statistical analysis in	
parameters identification	(75) 457
Araki, K. and M. Yamaguchi, Extended distributed model for analysis of non-ideal	
concentration operation	(75) 467
Araki, K. and M. Yamaguchi, Influences of spectrum change to 3-junction concentrator cells	(75) 707
Araki, K. and M. Yamaguchi, Sunshine environment and spectrum analysis for concentrator PV	
systems in Japan	(75) 715
Araki, K., see Khan, A.	(75) 271
Aramoto, T., F. Adurodija, Y. Nishiyama, T. Arita, A. Hanafusa, K. Omura and A. Morita,	
A new technique for large-area thin film CdS/CdTe solar cells	(75) 211
Arimune, H., see Niira, K.	(74) 247
Arita, T., see Aramoto, T.	(75) 211
Azuma, H., A. Takeuchi, T. Ito, H. Fukushima, T. Motohiro and M. Yamaguchi, Pulsed KrF	
excimer laser annealing of silicon solar cell	(74) 289
Bär, M., ChH Fischer, HJ. Muffler, S. Zweigart, F. Karg and M.C. Lux-Steiner, Replacement	
of the CBD-CdS buffer and the sputtered i-ZnO layer by an ILGAR-ZnO WEL:	
optimization of the WEL deposition	(75) 101
Bardos, R., see Neuhaus, D.H.	(74) 225

Barnham, K.W.J., see Bushnell, D.B.	(75) 299
Barnham, K.W.J., see Chatten, A.J.	(75) 363
Barua, A.K., see Ray, S.	(74) 387
Barua, A.K., see Jana, M.	(74) 407
Bau, S., see Kieliba, T.	(74) 261
Berge, C., see Bergmann, R.B.	(74) 213
Bergmann, J., see Sinh, N.D.	(74) 295
Bergmann, R.B., C. Berge, T.J. Rinke, J. Schmidt and J.H. Werner, Advances in monocrystal-	
line Si thin film solar cells by layer transfer	(74) 213
Berman, D., see Faiman, D.	(75) 629
Bett, A.W., see Hein, M.	(75) 277
Biro, D., R. Preu, O. Schultz, S. Peters, D.M. Huljic, D. Zickermann, R. Schindler, R. Lüdemann	
and G. Willeke, Advanced diffusion system for low contamination in-line rapid thermal	.74: 35
processing of silicon solar cells	(74) 35
Bo, L., see Matsukawa, H.	(75) 537
Bodegård, M., see Kessler, J.	(75) 35
Boreland, M. and M. Isogami, High-temperature growth of thin film microcrystalline silicon on	
silicon carbide using EBEP-CVD	(74) 561
Bourgoin, J.C., see Sun, G.C.	(75) 293
Brammer, T., W. Reetz, N. Senoussaoui, O. Vetterl, O. Kluth, B. Rech, H. Stiebig and	
H. Wagner, Optical properties of silicon-based thin-film solar cells in substrate and	
superstrate configuration	(74) 469
Brogren, M. and A. Green, Hammarby Sjöstad-an interdisciplinary case study of the integration	
of photovoltaics in a new ecologically sustainable residential area in Stockholm	(75) 761
Brogren, M., J. Wennerberg, R. Kapper and B. Karlsson, Design of concentrating elements with	
CIS thin-film solar cells for facade integration	(75) 567
Bucher, E., see Hahn, G.	(74) 57
Bucher, E., see Neu, W.	(74) 139
Bucher, E., see Peter, K.	(74) 219
Bucher, E., see Spiegel, M.	(74) 175
Bucher, E., see Hauser, A.	(75) 357
Bultman, J.H., see van der Heide, A.S.H.	(74) 43
Burkhardt, R., see Fath, P.	(74) 127
Bushnell, D.B., N.J. Ekins-Daukes, K.W.J. Barnham, J.P. Connolly, J.S. Roberts, G. Hill,	
R. Airey and M. Mazzer, Short-circuit current enhancement in Bragg stack multi-quantum-	1751 200
well solar cells for multi-junction space cell applications	(75) 299
Buxton, B.F., see Chatten, A.J.	(75) 363
Comphell D Widowhore D.	(74) 305
Campbell, P., see Widenborg, P. Chaisitsak, S., see Tokita, Y.	(75) 9
	(75) 475
Chang, SH., see Kang, MG. Chatten, A.J., K.W.J. Barnham, B.F. Buxton, N.J. Ekins-Daukes and M.A. Malik, A new	(73) 473
	(75) 363
approach to modelling quantum dot concentrators  Cho, EC., J. Xia, A.G. Aberle and M.A. Green, Antireflection and surface passivation	(75) 363
behaviour of SiO <sub>2</sub> Si SiO <sub>2</sub> quantum wells on silicon	(74) 147
Cho, Y.H., see Ebong, A.	(74) 51
Choulat, P., see Szlufcik, J.	(74) 155
Ciorba, U., see Menna, P.	(75) 519
	(75) 739
Close, J., The Hong Kong schools solar education programme Connolly, J.P., see Bushnell, D.B.	(75) 739
Connony, our of acc. pushingly D.D.	(13) =99
Dakkak, M., see Muhida, R.	(75) 697
Damiani, B.M., see Ruby, D.S.	(74) 133
AC 2011 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	11111111

Das, C., see Ray, S.	(74) 393
Das, D., see Jana, M.	(74) 407
Das, R., see Ray, S.	(74) 387
de Angelis, N., see Sun, G.C.	(75) 293
de Held, E., see Faiman, D.	(75) 629
De Wolf, S., see Szlufcik, J.	(74) 155
Debarge, L., M. Schott, J.C. Muller and R. Monna, Selective emitter formation with a single	e
screen-printed p-doped paste deposition using out-diffusion in an RTP-step	(74) 71
Dekkers, H., see Szlufcik, J.	(74) 155
Dhamrin, M., R. Ozaki and T. Saitoh, Quality evaluation and improvement of iron-dope	d
electromagnetic multycrystalline silicon wafers	(74) 203
Dharmarasu, N., M. Yamaguchi, A. Khan, T. Takamoto, T. Ohshima, H. Itoh, M. Imaizumi an	d
S. Matsuda. Low-energy proton-induced defects in n p InGaP solar cells	(75) 327
Dharmarasu, N., see Fahim, N.F.	(75) 411
Dharmaraso, N., see Khan, A.	(75) 271
Dharmarasu, N., see Yamaguchi, M.	(75) 285
Dimmler, B., see Powalla, M.	(75) 27
Dimroth, F., see Hein, M.	(75) 277
Dubail, J., see Meier, J.	(74) 457
Dubail, S., see Meier, J.	(74) 457
Duerinckx, F., see Szlufcik, J.	(74) 155
Ebest, G., see König, D.	(75) 335
Ebest, G., see König, D.	(75) 381
Ebong, A., Y.H. Cho, M. Hilali, A. Rohatgi and D. Ruby, Rapid thermal technologies for	
high-efficiency silicon solar cells	(74) 51
Ebong, A., see Rohatgi, A.	(74) 117
Eguchi, Y., see Uematsu, T.	(75) 557
Eid, A.E., see Fahim, N.F.	(75) 411
Eisele, W., A. Ennaoui, P. Schubert-Bischoff, M. Giersig, C. Pettenkofer, J. Krause M. Lux-Steiner, S. Zweigart and F. Karg, XPS. TEM and NRA investigations of	
Zn(Se,OH) Zn(OH) films on Cu(In,Ga)(S,Se) substrates for highly efficient solar cells	(75) 17
Ekins-Daukes, N.J., see Bushnell, D.B.	(75) 299
Ekins-Daukes, N.J., see Chatten, A.J.	
	(75) 363
Endo, E. and Y. Tamura, Cost-effectiveness analysis of R&D on solar cells in Japan	(75) 751
Ennaoui, A., see Eisele, W.	(75) 17
Eom, J.H., see Ahn, J.H.	(74) 315
Eyer, A., see Kieliba, T.	(74) 261
Fahim, N.F., N. Kojma, M. Yamaguchi, Y. Ohshita, A.E. Eid and N. Dharmarasu, Electron sp	
resonance studies on defects in phosphorus ion-implanted C <sub>60</sub> films	(75) 411
Fahmy, F.H., see Nafeh, Abd El-Shafy A.	(75) 723
Fahrner, W.R., see Ulyashin, A.	(74) 195
Faiman, D., see Katz, E.A.	(75) 421
Faiman, D., D. Berman, E. de Held and H. Oldenkamp, Study of AC-module inverters und	
extreme desert conditions	(75) 629
Falk, F., see Sinh, N.D.	(74) 295
Fath, P., see Hahn, G.	(74) 57
Fath, P., H. Nussbaumer and R. Burkhardt, Industrial manufacturing of semitranspare	
crystalline silicon POWER solar cells	(74) 127
Fath, P., see Neu, W.	(74) 139
Fath, P., see Peter, K.	(74) 219
Fath, P., see Spiegel, M.	(74) 175

Fath, P., see Hauser, A.	(75) 357
Faÿ, S., see Meier, J.	(74) 457
Feitknecht, L., see Meier, J.	(74) 457
Feitknecht, L., J. Meier, P. Torres, J. Zürcher and A. Shah, Plasma deposition of thin film	
silicon: kinetics monitored by optical emission spectroscopy	(74) 539
Ferrazza, F., see Parretta, A.	(75) 497
Finger, F., see Lundszien, D.	(74) 365
Finger, F., see Rech, B.	(74) 439
Fischer, ChH, see Bär, M.	(75) 101
Freeouf, J., see Li, G.	(75) 307
Froumin, N., see Katz, E.A.	(75) 421
Fujihara, T., see Nakamura, K.	(75) 185
Fujii, T., see Hiraoka, S.	(75) 781
Fujimura, Y., see Jung, S.	(74) 421
Fujisaki, T., A. Yamada and M. Konagai, Effects of grain boundaries on cell performance of	
poly-silicon thin film solar cells by 2-D simulation	(74) 331
Fujishiro, M., see Tanaka, T.	(75) 115
Fujita, R., M. Imaizumi, K. Aoyama, S. Matsuda and S. Tokunaga, Analysis of generated power	
of ETS-VII during solar activity maximum period	(75) 319
Fujiwara, T., see Itoh, T.	(74) 379
Fujiwara, V., see Nagoya, Y.	(75) 163
Fukuda, S., see Yamamoto, K.	(74) 449
Fukui, K., see Niira, K.	(74) 247
Fukunaga, K., see Itoh, T.	(74) 379
Fukushima, H., see Azuma, H.	(74) 289
Fuyuki, T., see Ishikawa, Y.	(74) 255
Fuyuki, T., see Yamamoto, Y.	(75) 433
Fuyuki, T., see Nishioka, K.	(75) 665
Gao, M., see Ulyashin, A.	(74) 195
Ge, H.C., see Geng, X.H.	(75) 489
Geiger, P., see Hahn, G.	(74) 57
Geng, X.H., J.M. Xue, H.C. Ge, H.B. Li, Z.P. Wang, Q.Z. Wang and H.Z. Ren, Modeling of a-Si/poly-Si and a-Si/poly-Si/poly-Si stacked solar cells	(75) 489
Gerhard, A., see Rumberg, A.	(75) 1
Gerhards, C., see Spiegel, M.	(74) 175
Giersig, M., see Eisele, W.	(75) 17
Gilard, O., see Sun, G.C.	(75) 293
Goetzberger, A., J. Luther and G. Willeke, Solar cells: past, present, future	(74) 1
Golay, S., see Meier, J.	(74) 457
Gotoh, M., see Nakamura, K.	(75) 185
Green, A., see Brogren, M.	(75) 761
Green, M.A., see Cho, EC.	(74) 147
Green, M.A., see Parretta, A.	(75) 497
Hadi, H., S. Tokuda and S. Rahardjo, Evaluation of performance of photovoltaic system with	
maximum power point (MPP)	(75) 673
Hagibara, R., see Nishioka, K.	(75) 665
Hagihara, R., see Yagi, Y.	(75) 655
Hahn, G., P. Geiger, D. Sontag, P. Fath and E. Bucher, Influence of hydrogen passivation on	(13) 033
majority and minority charge carrier mobilities in ribbon silicon	(74) 57
Hakuma, H., see Niira, K.	(74) 247
Hamada, M., see Matsukawa, H.	(75) 537

Hamakawa, Y., Solar PV energy conversion and the 21st century's civilization	(74) 13
Hamakawa, Y., see Hiraoka, S.	(75) 781
Hamakawa, Y., see Minemoto, T.	(75) 121
Hamakawa, Y., see Takakura, H.	(74) 479
Han, Y., see Heo, J.	(75) 193
Hanafusa, A., see Aramoto, T.	(75) 211
Hanoka, J.I., see Rohatgi, A.	(74) 117
Hara, I., see Kushiya, K.	(75) 171
Harder, NP., see Neuhaus, D.H.	(74) 225
Hasegawa, Y., see Medvedkin, G.A.	(75) 127
Hashigami, H., Y. Itakura and T. Saitoh, Interpretation of light-induced cell performance	
degradation by means of spectroscopic light illumination	(75) 351
Hashimoto, A., T. Kitano, A.K. Nguyen, A. Masuda, A. Yamamoto, S. Tanaka, M. Takahashi,	
A. Moto, T. Tanabe and S. Takagishi, Raman characterization of lattice-matched GaInAsN	
layers grown on GaAs (001) substrates	(75) 313
Hashimoto, A., see Yamamoto, A.	(75) 451
Hashimoto, T., see Yamamoto, S.	(75) 577
Hashimoto, Y., see Minemoto, T.	(75) 121
Hashimoto, Y., see Satoh, T.	(75) 65
Hatayama, T., see Ishikawa, Y.	(74) 255
Hatayama, T., see Nishioka, K.	(75) 665
Hatayama, T., see Yamamoto, Y.	(75) 433
Hauser, A., M. Spiegel, P. Fath and E. Bucher, Influence of an ammonia activation prior to the	
PECVD SiN deposition on the solar cell performance	(75) 357
Hayakawa, T., see Komatsu, Y.	(74) 513
Hayakawa, T., see Yamamoto, H.	(74) 525
Hayashi, K., see Yamamoto, K.	(74) 449
Hayashi, S., see Satoh, T.	(75) 65
Hein, M., F. Dimroth, G. Siefer and A.W. Bett, Characterisation of a 300 × photovoltaic	
concentrator system with one-axis tracking	(75) 277
Heiser, G., see Altermatt, P.P.	(74) 165
Heo, J., H. Ahn, R. Lee, Y. Han and D. Kim, Influence of ITO surface modification on the	
growth of CdS and on the performance of CdS/CdTe solar cells	(75) 193
Heo, J.H., see Parm, I.O.	(74) 97
Hezel, R., High-efficiency OECO Czochralski-silicon solar cells for mass production	(74) 25
Hilali, M., see Ebong, A.	(74) 51
Hill, G., see Bushnell, D.B.	(75) 299
Hirano, K., see Kurobe, Ki.	(74) 183
Hiraoka, S., T. Fujii, H. Takakura and Y. Hamakawa, Tilt angle dependence of output power in	
an 80 kWp hybrid PV system installed at Shiga in Japan	(75) 781
Hirose, K., see Medvedkin, G.A.	(75) 127
Hoornstra, J., see van der Heide, A.S.H.	(74) 43
Horzel, J., see Szlufcik, J.	(74) 155
Huljic, D.M., see Biro, D.	(74) 35
Hussein, R., see Ulyashin, A.	(74) 195
Huster, F., see Spiegel, M.	(74) 175
Truster, Fit see Opinger, on	(11) 110
Ichikawa, M., see Yamamoto, K.	(74) 449
Ichimura, M., see Takeuchi, K.	(75) 427
Igarashi, K., see Komatsu, Y.	(74) 513
Ikki, O., Present status and future prospects of PV activities in Japan	(75) 729
Imaizumi, M., see Dharmarasu, N.	(75) 327
Imaizumi, M., see Fujita, R.	(75) 319
2000 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(10)

Imaizumi, M., see Lee, HS.	(75)	
Imaizumi, M., see Khan, A.	(75) 2	
Ishibashi, Y., see Masuda, A.	(74) 3	
Ishida, T., see Yagi, Y.	(75)6	155
Ishikawa, T., K. Kurokawa, N. Okada and K. Takigawa, Evaluation of operation characteristics		
in multiple interconnection of PV systems	(75).5	129
Ishikawa, Y., Y. Yamamoto, T. Hatayama, Y. Uraoka and T. Fuyuki, Crystallographic analysis of high quality poly-Si thin films deposited by atmospheric pressure chemical vapor		
deposition	(74) 2	
Ishikawa, Y., see Yamamoto, Y.	(75)4	
Isogami, M., see Boreland, M.	(74) 5	
Isojima, K., see Kashiwaba, Y.	(75) 2	253
Isomura, M., K. Nakahata, M. Shima, S. Taira, K. Wakisaka, M. Tanaka and S. Kiyama,		
Microcrystalline silicon-germanium solar cells for multi-junction structures	(74) 5	
Itakura, Y., see Hashigami, H.	(75).3	351
Ito, M., K. Kato, H. Sugihara, T. Kichimi, J. Song and K. Kurokawa, A preliminary study on potential for very large-scale photovoltaic power generation (VLS-PV) system in the Gobi		
desert from economic and environmental viewpoints	(75)	
Ito, T., see Azuma, H.	(74)	
Ito, T., see Jung, S.	(74)	
Itoh, H., see Dharmarasu, N.	(75).	
Itoh, H., see Khan, A.	(75)	
Itoh, H., see Lee, HS.	(75)	
Itoh, H., see Tanaka, T.	(75)	109
Itoh, T., K. Fukunaga, Y. Katoh, T. Fujiwara and S. Nonomura, Doping of a-SiC <sub>V</sub> :H films		
including µc-Si:H by hot-wire CVD and their application as a wide gap window for		
heterojunction solar cells	(74)	
Izawa, T., see Oozeki, T.	(75)	
Izumi, A., see Masuda, A.	(74)	3/3
Jäger-Waldau, A., see Rumberg, A.	(75)	1
Jana, M., D. Das and A.K. Barua, Promotion of microcrystallization by argon in moderately	, ,	
hydrogen diluted silane plasma	(74)	407
Jeong, J., see Rohatgi, A.	(74)	
Jeong, WJ. and GC. Park, Structural and electrical properties of CuGaS- thin films by		
electron beam evaporation	(75)	93
Jin, P., see Xu, G.	(74)	
Job, R., see Ulyashin, A.	(74)	
Joge, T., see Uematsu, T.	(75)	
Jooss, W., see Neu, W.	(74)	
Jooss, W., see Spiegel, M.	(74)	
Joyce, D.B., see Khattak, C.P.	(74)	
Jun, K.H., J.K. Rath and R.E.I. Schropp, Enhanced light-absorption and photo-sensitivity in		
amorphous silicon germanium/amorphous silicon multilayer	(74)	357
Jung, S., Y. Fujimura, T. Ito and H. Shirai, Chemistry of the chlorine-terminated surface for		
low-temperature growth of crystal silicon films by RF plasma-enhanced chemical vapor		
deposition	(74)	421
Kamesaki, K., see Masuda, A.	(74)	373
Kang, C., see Kang, J.	(74)	
Kang, J., J. You, C. Kang, J.J. Pak and D. Kim, Investigation of Cu metallization for Si solar	,	
cells	(74)	91
Kang, K.H., see Lee, J.C.	(74)	
	()	

Kang, K.W., see Song, H.K.	(75)	145
Kang, MG., NG. Park, YJ. Park, KS. Ryu and SH. Chang, Manufacturing method for		
transparent electric windows using dye-sensitized TiO2 solar cells	(75)	
Kapper, R., see Brogren, M.	(75)	
Karg, F., see Bär, M.	(75)	
Karg, F., see Eisele, W.	(75)	
Karlsson, B., see Brogren, M.	(75)	567
Kashiwaba, Y., K. Isojima and K. Ohta, Improvement in the efficiency of Cu-doped CdS/non-		
doped CdS photovoltaic cells fabricated by an all-vacuum process	(75)	253
Kato, K., see Ito, M.	(75)	507
Kato, K., see Menna, P.	(75)	519
Katoh, Y., see Itoh, T.	(74)	379
Katsumata, Y., see Medvedkin, G.A.	(75)	135
Katz, E.A., D. Faiman, S.M. Tuladhar, S. Shtutina, N. Froumin, M. Polak and Y. Strzhemechny,		
Diffusion processes for doping of C <sub>60</sub> (fullerene) thin films	(75)	421
Kawakita, S., see Lee, HS.	(75)	57
Kawamura, H., K. Naka, N. Yonekura, S. Yamanaka, H. Kawamura, H. Ohno and K. Naito,		
Simulation of $I-V$ characteristics of a PV module with shaded PV cells	(75)	613
Kawamura, H., see Kawamura, H.	(75)	613
Kessler, J., J. Wennerberg, M. Bodegård and L. Stolt, Highly efficient Cu(In,Ga)Se2 mini-		
modules	(75)	35
Kessler, J., see Wennerberg, J.	(75)	
Khan, A., M. Yamaguchi, Y. Ohshita, N. Dharmaraso, K. Araki, V.T. Khanh, H. Itoh,		
T. Ohshima, M. Imaizumi and S. Matsuda, Strategies for improving radiation tolerance of Si		
space solar cells	(75)	271
Khan, A., see Dharmarasu, N.	(75)	
Khan, A., see Sun, G.C.	(75)	
Khan, A., see Yamaguchi, M.	(75)	
Khanh, V.T., see Khan, A.	(75)	
Khattak, C.P., D.B. Joyce and F. Schmid, A simple process to remove boron from metallurgical		
grade silicon	(74)	77
Kichimi, T., see Ito, M.	(75)	
Kieliba, T., S. Bau, R. Schober, D. Oßwald, S. Reber, A. Eyer and G. Willeke, Crystalline silicon	1.07	
thin-film solar cells on ZrSiO <sub>4</sub> ceramic substrates	(74)	261
Kim, D., see Kang, J.	(74)	
Kim, D., see Kim, H.	(74)	
Kim, D., see Kim, H.	(74)	
Kim, D., see Heo, J.		193
Kim, D.S., see Lee, E.J.	(74)	
Kim, D.S., see Parm, I.O.		97
Kim, H., D. Kim, G. Lee, D. Kim and S.H. Lee, Polycrystalline Si films formed by Al-induced	(14)	71
crystallization (AIC) with and without Al oxides at Al/a-Si interface	(74)	323
Kim, H.J., see Song, H.K.		145
Kim, J., see Parm, I.O.		97
Kim, K., see Parm, I.O.		97
Kim, KH., see Seol, JS.		155
Kim, K.H., see Yun, J.H.		203
Kim, S.G., see Song, H.K.		145
Kim, S.K., see Lee, J.C.		233
Kim, S.K., see Song, H.K.		145
Kim, YH., see Lee, SC.		481
Kim, Y.K., see Lee, K.M.		439
Kishi, H., see Yagi, Y.	(75)	655

Kitamora, A., see Taksijawas, K.         (75) 547           Kitano, J., see Kunii, T.         (74) 438           Kitano, J., see Kunii, T.         (74) 339           Kiyama, S., see Josmura, M.         (74) 439           Kiyama, S., see Harsta, K.         (75) 647           Kiyama, S., see Murtat, K.         (74) 439           Kityama, S., see Murtat, K.         (74) 439           Kityama, S., see Murtat, K.         (74) 439           Kityama, S., see Wang, Y.         (74) 449           Kulth, O., see Brammer, T.         (75) 647           Kobata, T., see Vanaguoth, T.         (75) 647           Koide, N., see Vanaguoth, T.         (75) 647           Koide, N., see Vanaguoth, T.         (75) 637           Koide, N., see Wanstauskaw, H.         (75) 537           Koizumi, K., see Vashioka, R.         (75) 537           Koizumi, K., See Vashioka, R.         (75) 623           Kojuma, N., see Shalim, N.F.         (75) 623           Kojuma, N., see Shalim, N.F.         (74) 624           Kojuma, K., see Vashioka, R.         (74) 624           Kojuma, K., see Walkashaw, H.         (74) 623           Kojuma, N., see Shalim, N.F.         (74) 623           Komada, M., see Nitra, K.         (74) 623           Komada, M., see Nitra, K.		
Kityana, S., see Maruyana, E.         (74) 439           Kiyama, S., see Isomura, M.         (75) 647           Kiyama, S., see Isomura, M.         (75) 647           Kiyama, S., see Vagi, Y.         (75) 655           Kluth, O., see Rech, B.         (74) 439           Kluth, O., see Brammer, T.         (74) 439           Kohat, T., see Yamamoto, K.         (74) 449           Koide, N., see Komatsu, Y.         (74) 513           Koizumi, K., see Matsukawa, H.         (75) 537           Koizumi, K., see Vaniamoto, K.         (75) 537           Koizumi, K., See Oshioka, K.         (75) 537           Koizumi, K., See Matsukawa, H.         (75) 537           Koizumi, K., See Vaniamoto, K.         (75) 537           Koizumi, K., See Stahin, N.F.         (75) 623           Kojman, N., see Fahim, N.F.         (75) 623           Kojman, N., see Fahim, N.F.         (74) 649           Komatsu, Y., See Yamamoto, H.         (74) 649           Komatsu, Y., see Yamamoto, H.         (74) 513           Komodo, M., see Maina, P.         (74) 513           Konada, M., see Tokita, Y.         (74) 513           Konada, M., see Tokita, Y.         (74) 514           Kondo, M., see Mase, H.         (74) 517           Kondo, M., see Mase, H. <t< td=""><td>Kitamura, A., see Takigawa, K.</td><td>(75) 547</td></t<>	Kitamura, A., see Takigawa, K.	(75) 547
Kiyama, S., see Isomura, E.         (74) 319           Kiyama, S., see Isomura, M.         (75) 647           Kiyama, S., see Wagi, Y.         (75) 657           Kihth, O., see Brammer, T.         (74) 499           Kohata, T., see Yamaguchi, T.         (74) 496           Koli, Y., see Yamamoto, K.         (74) 498           Koiz, W., see Yamamoto, K.         (74) 498           Koizumi, K., see Matsukawa, H.         (75) 537           Koizumi, K., see Yashioka, K.         (75) 537           Koizumi, K., Sugita, K. Yoshioka and T. Saitoh, Performance improvement of a static concentrator module with an asymmetric v-groove backsheet structure         (75) 623           Komatsu, Y., N. Koide, MJ. Yang, T. Nakano, Y. Nagano, K. Igarashi, K. Yoshida, K. Yano, T. Hayakawa, H. Taniguchi, M. Shimizu and H. Takiguchi, a-Sime-Si hybrid solar cell using silicon sheet substrate         (74) 213           Komatsu, Y., See Yamamoto, H.         (74) 213           Komatsu, Y., see Yamamoto, H.         (74) 214           Komatsu, Y., see Yamamoto, H.         (74) 217           Komato, Y., see Yamamoto, H.         (74) 217           Komatou, Y., see Yamamoto, H.         (74) 219           Komodo, M., see Nakahima, T.         (74) 219           Kondo, M., see Nakahima, T.         (74) 219           Kondo, M., see Nakahima, T.         (75) 35           Ko	Kitano, T., see Hashimoto, A.	(75) 313
Kiyama, S., see Murata, K.         (74) 519           Kiyama, S., see Yagi, Y.         (75) 675           Kluth, O., see Rech, B.         (74) 439           Kobata, T., see Yamaguchi, T.         (74) 439           Koide, N., see Komatsu, Y.         (74) 513           Koizumi, K., see Yamaguchi, T.         (74) 513           Koizumi, K., see Yamaguchi, T.         (74) 513           Koizumi, K., see Komatsu, Y.         (75) 537           Koizumi, K., see Yashioka, K.         (75) 537           Koizumi, K., see Yashioka, K.         (75) 537           Koizumi, K., see Yashio, N.F.         (75) 623           Kojma, N., see Fahim, N.F.         (74) 513           Komatsu, Y., N. Koide, MJ. Yang, T. Nakano, Y. Nagano, K. Igarashi, K. Yoshida, K. Yano, T. Hayakawa, H. Taniguchi, M. Shimizu and H. Takiguchi, a-Si me-Si hybrid solar cell using silicon sheet substrate         (74) 525           Komada, M., see Fahim, N.F.         (74) 525           Komado, M., see Nijsaki, T.         (74) 525           Komado, M., see Miyahara, H.         (74) 525           Kondo, M., see Maskahima, T.         (74) 525           Kondo, M., see Wada, T.         (74) 525           Kondo, M., see Wada, T.         (74) 527           Kondo, M., see Wada, T.         (75) 537           Kondo, M., see Wada, T.         (75) 537<	Kitao, J., see Kunii, T.	(74) 415
Kiyama, S., see Warata, K.         (75) 647           Kiyama, S., see Wagi, Y.         (75) 655           Kluth, O., see Rech. B.         (74) 439           Kluth, O., see Brammer, T.         (74) 469           Kobata, T., see Vamaguchi, T.         (74) 469           Koide, N., see Vamaguchi, T.         (74) 419           Koizumi, K., see Watushawa, H.         (74) 513           Koizumi, K., see Watushawa, H.         (75) 537           Koizumi, K., see Yoshioka, K.         (75) 623           Koizumi, K., see Yoshioka, K.         (75) 623           Koizumi, K., Sugita, K. Yoshioka and T. Saitoh, Performance improvement of a state concentrator module with an asymmetric v-groove backsheet structure         (75) 623           Komatsu, Y., Nee Fahim, N.F.         (75) 624           Komatsu, Y., N. Koide, MJ. Yang, T. Nakano, Y. Nagano, K. Igarashi, K. Yoshida, K. Yano, T. Hayakawa, H. Taniguchi, M. Shimizu and H. Takiguchi, a-Si me-Si hybrid solar cell using silicon sheet substrate         (74) 525           Komatsu, Y., see Yamamoto, H.         (74) 624           Komatsu, Y., see Yamamoto, H.         (74) 525           Komado, M., see Nokashima, T.         (74) 429           Kondo, M., see Nakashima, T.         (74) 429           Kondo, M., see Nakashima, T.         (74) 439           Kondo, M., see Wada, T.         (75) 537           Kon	Kiyama, S., see Maruyama, E.	(74) 339
Kiyama, S., see Yagi, V.         (75) 655           Kluth, O., see Rech, B.         (74) 496           Kobata, T., see Yamaguchi, T.         (75) 675           Koi, Y., see Yamamoto, K.         (74) 496           Koide, N., see Komatsu, Y.         (74) 1913           Koizumi, H., see Matsukawa, H.         (75) 537           Koizumi, K., K. Sugita, K. Yoshioka and T. Saitoh, Performance improvement of a static concentrator module with an asymmetric v-groove backsheet structure         (75) 623           Kojma, N., see Fahim, N.F.         (75) 627           Kojma, N., see Fahim, N.F.         (75) 628           Kojma, N., see Fahim, N.F.         (75) 629           Kojma, N., see Fahim, N.F.         (75) 629           Kojma, N., see Fahim, N.F.         (75) 629           Kojma, N., see Fahim, N.F.         (74) 629           Kojma, N., see Fahim, N.F.         (74) 629           Komada, M., see Hana, P.         (74) 629           Komoda, M., see Hujsaki, T.         (74) 629           Komagai, M., see Tokita, Y.         (74) 629           Kondo, M., see Nakashima, T.         (74) 629           Kondo, M., see Nakashima, T.         (74) 629           Kondo, M., see Nakas, H.         (74) 629           Kondo, M., see Mase, H.         (74) 629           Kondo, M., see Mase, H. </td <td>Kiyama, S., see Isomura, M.</td> <td>(74) 519</td>	Kiyama, S., see Isomura, M.	(74) 519
Kluth, O., see Rech, B.         (74) 439           Kluth, O., see Brammer, T.         (74) 489           Kobata, T., see Vamaguchi, T.         (75) 87           Koi, Y., see Yamamoto, K.         (74) 449           Koiden, N., see Komatsu, Y.         (75) 537           Koizumi, K., see Vashioka, K.         (75) 537           Koizumi, K., See Yashioka, K.         (75) 373           Koizumi, K., K. Sugita, K. Voshioka and T. Saitoh, Performance improvement of a static concentrator module with an asymmetric v-groove backsheet structure         (75) 623           Koimansu, Y., See Yahini, N.F.         (75) 623           Komatsu, Y., N. Koide, MJ. Yang, T. Nakano, Y. Nagano, K. Igarashi, K. Yoshida, K. Yanon, T. Hayakawa, H. Taniguchi, M. Shimizu and H. Takiguchi, a-Si mc-Si hybrid solar cell using silicon sheet substrate         (74) 513           Komatsu, Y., see Yamamoto, H.         (74) 252           Komatsu, Y., see Yahashima, T.         (74) 252           Komodo, M., see Niira, K.         (74) 252           Komodo, M., see Yakashima, T.         (74) 351           Kondo, M., see Yakashima, T.         (74) 429           Kondo, M., see Nakashima, T.         (74) 439	Kiyama, S., see Murata, K.	(75) 647
Kubh, O., see Brammer, T.         (74) 469           Kobata, T., see Yamaguchi, T.         (75) 47           Koi, Y., see Yamamoto, K.         (74) 419           Koizumi, H., see Matsukawa, H.         (75) 537           Koizumi, K., see Yoshioka, K.         (75) 373           Koizumi, K., see Yoshioka, K.         (75) 623           Kojma, N., see Fahim, N.F.         (75) 623           Kojma, N., see Fahim, N.F.         (75) 623           Kojma, N., see Fahim, N.F.         (74) 131           Kojma, N., see Fahim, N.F.         (75) 623           Komada, M., see Fahim, N.F.         (74) 631           Komada, M., see Palisakir, M.         (74) 247           Komodo, M., see Manamoto, H.         (74) 247           Komada, M., see Fujisaki, T.         (74) 331           Konagai, M., see Fujisaki, T.         (74) 439           Konado, M., see Nasashima, T.         (74) 439           Kondo, M., see Suzuki, S.         (74) 439           Kondo, M., see Suzuki, S.         (74) 437           Kondo, M., see Suzuki, S.         (74) 437           Kondo, M., see Suzuki, S.         (	Kiyama, S., see Yagi, Y.	(75) 655
Kohata, T., see Yamaguchi, T.         (74) 87           Koi, Y., see Yamamoto, K.         (74) 491           Koide, N., see Komatsu, Y.         (74) 513           Koizumi, H., see Matsukawa, H.         (75) 373           Koizumi, K., see Yoshioka, K.         (75) 373           Koizumi, K., S. Sugita, K. Yoshioka and T. Saitoh, Performance improvement of a static concentrator module with an asymmetric v-groove backsheet structure         (75) 623           Kojma, N., see Fahim, N.F.         (75) 623           Komatsu, Y., N. Koide, MJ. Yang, T. Nakano, Y. Nagano, K. Igarashi, K. Yoshida, K. Yanon, T. Hayakawa, H. Taniguchi, M. Shimizu and H. Takiguchi, a-Si mc-Si hybrid solar cell using silicon sheet substrate         (74) 247           Komatsu, Y., see Yamamoto, H.         (74) 247           Komatsu, Y., see Yamamoto, H.         (74) 247           Komado, M., see Niira, K.         (74) 247           Komado, M., see Nakashima, T.         (74) 331           Konagai, M., see Tokita, Y.         (74) 429           Kondo, M., see Nakashima, T.         (74) 429           Kondo, M., see Nakashima, T.         (74) 439           Kondo, M., see Mase, H.         (74) 429           Kondo, M., see Wase, M.         (74) 429           Kondo, M., see Mase, H.         (74) 435           Koing, D. and G. Ebest, New contact frame design for minimizing losses due to ede recombination and g	Kluth, O., see Rech, B.	(74) 439
Koid, Y., see Yamamoto, K.         (74) 449           Koide, N., see Komatsu, Y.         (75) 513           Koizumi, K., see Yoshioka, K.         (75) 373           Koizumi, K., see Yoshioka, K.         (75) 373           Koizumi, K., K. Sugita, K. Yoshioka and T. Saitoh, Performance improvement of a static concentrator module with an asymmetric v-groove backsheet structure         (75) 623           Kojma, N., see Fahim, N.F.         (75) 411           Komatsu, Y., N. Koide, MJ. Yang, T. Nakano, Y. Nagano, K. Igarashi, K. Yoshida, K. Yano, T. Hayakawa, H. Taniguchi, M. Shimizu and H. Takiguchi, a-Si/mc-Si/mbylrid solar cell using silicon sheet substrate         (74) 247           Komoda, M., see Yamamoto, H.         (74) 247           Komodo, M., see Yamamoto, H.         (74) 247           Komodo, M., see Yijisaki, T.         (74) 331           Konagai, M., see Tokita, Y.         (75) 99           Kondo, M., see Masashima, T.         (74) 429           Kondo, M., see Nakashima, T.         (74) 429           Kondo, M., see Wasa, T.         (74) 433           Kondo, M., see Wasa, T.         (74) 533           Kondo, M., see Wasa, H.         (74) 533           Konig, D. and G. Ebest, Novel external field source by localization of electrons for improvement of solar cells         (75) 335           Kojeccek, R., see Peter, K.         (75) 535           Kozuma, S., see Yagi	Kluth, O., see Brammer, T.	(74) 469
Koide, N., see Komatsuk, Y.         (74) 513           Koizumi, H., see Matsukawa, H.         (75) 537           Koizumi, K., K. Sugita, K. Yoshioka and T. Saitoh, Performance improvement of a static concentrator module with an asymmetric v-groove backsheet structure         (75) 623           Kojma, N., see Fahim, N.F.         (75) 141           Kojma, N., see Fahim, N.F.         (75) 623           Kojma, N., see Fahim, N.F.         (75) 623           Kojma, N., see Fahim, N.F.         (75) 623           Komatsu, Y., N. Koide, MJ. Yang, T. Nakano, Y. Nagano, K. Igarashi, K. Yoshida, K. Yano, T. Hayakawa, H. Taniguchi, M. Shimizu and H. Takiguchi, a-Si me-Si hybrid solar cell using silicon sheet substrate         (74) 513           Komatsu, Y., see Yamamoto, H.         (74) 227           Komoda, M., see Niira, K.         (74) 247           Komodo, K., see Menna, P.         (75) 519           Konagai, M., see Tujisaki, T.         (74) 321           Kondo, M., see Nakashima, T.         (74) 425           Kondo, M., see Nakashima, T.         (74) 427           Kondo, M., see Wada, T.         (74) 427           Kondo, M., see Wada, T.         (74) 427           Koing, D. and G. Ebest, Novel external field source by localization of electrons for improvement of solar cells         (75) 335           Konge, R., see Peter, K.         (74) 219           Kozame, J., see Eisele,	Kobata, T., see Yamaguchi, T.	(75) 87
Koizumi, H., see Matsukawa, H. Koizumi, K., see Yoshioka, K. Koizumi, K., see Yoshioka, K. Koizumi, K., see Yoshioka, K. Koizumi, K., K. Sugita, K. Yoshioka and T. Saitoh, Performance improvement of a static concentrator module with an asymmetric v-groove backsheet structure  Kojman, N., see Fahim, N.F. Komatsu, Y., N. Koide, MJ. Yang, T. Nakano, Y. Nagano, K. Igarashi, K. Yoshida, K. Yano, T. Hayakawa, H. Taniguchi, M. Shimizu and H. Takiguchi, a-Si mc-Si hybrid solar cell using silicon sheet substrate  Komatsu, Y., see Yamamoto, H. Komoto, K., see Menna, P. Komodo, M., see Niira, K. Komoto, K., see Menna, P. Konagai, M., see Fujisaki, T. Konagai, M., see Tokita, Y. Konagai, M., see Tokita, Y. Kondo, M., see Nasuno, Y. Kondo, M., see Wada, T. Konig, D. and G. Ebest, Novel external field source by localization of electrons for improvement of solar cells  König, D. and G. Ebest, New contact frame design for minimizing losses due to edge recombination and grid-induced shading  Kopecek, R., see Peter, K. Kosalishi, K., see Matsukawa, H.  Kosalishi, K., see Matsukawa, H.  Kosalishi, K., see Matsukawa, H.  Kozuma, S., see Yagi, Y.  Krauser, J., see Eisele, W.  Kref, J., M. Zeman, F. Smole, J.W. Metselaar and M. Topič, Analysis of light scattering in a-Si-H-based solar cells with rough interfaces  Krauser, J., see Eisele, W.  Kroll, U., see Meier, J.  Kunii, T., J. Kitao, K. Mori, N. Yoshida and S. Nonomura, Temperature dependence of absorption coefficient spectra for µc-Si films by resonant photothermal bending spectroscopy  Kurokawa, K., see Ishikawa, T.  Kurokawa, K., see Kalikawa, T.  Kurokawa, K., see Kalikawa, H.  (74) 415  Kurokawa, K., see Kalikawa, H.	Koi, Y., see Yamamoto, K.	(74) 449
Koizumi, K., see Yoshioka, K. Koizumi, K., K. Sugita, K. Yoshioka and T. Saitoh, Performance improvement of a static concentrator module with an asymmetric v-groove backsheet structure  (75) 623  Kojma, N., see Fahim, N.F. Komatsu, Y., N. Koide, MJ. Yang, T. Nakano, Y. Nagano, K. Igarashi, K. Yoshida, K. Yano, T. Hayakawa, H. Taniguchi, M. Shimizu and H. Takiguchi, a-Si me-Si hybrid solar cell using silicon sheet substrate  (74) 513  (74) 255  Komatsu, Y., see Yamamoto, H. Komoto, K., see Menna, P. (75) 519  Konagai, M., see Fujisaki, T. (74) 331  Konagai, M., see Tujisaki, T. (74) 331  Kondo, M., see Makashima, T. (74) 429  Kondo, M., see Nasuno, Y. Kondo, M., see Nasuno, Y. Kondo, M., see Nasuno, Y. Kondo, M., see Waka, H. (74) 437  Kondo, M., see Waka, H. (74) 533  Kondo, M., see Waka, H. (75) 537  Kondo, M., see Waka, H. (75) 538  Kong, D. and G. Ebest, Novel external field source by localization of electrons for improvement of solar cells  Kopecek, R., see Peter, K. (74) 219  Kosahishi, K., see Matsukawa, H. (75) 335  Krauser, J., see Eisele, W. Kré, J., M. Zeman, F. Smole, J.W. Metselaar and M. Topič, Analysis of light scattering in a-SiFH-based solar cells with rough interfaces  Kres, A., see Neu, W. Kroll, U., see Meier, J. Kunii, T., J. Kitao, K. Mori, N. Yoshida and S. Nonomura, Temperature dependence of absorption coefficient spectra for µc-Si films by resonant photothermal bending spectroscopy  Kurokawa, K., see Ishikawa, T. (74) 183  Kurokawa, K., see Kulsukawa, H. (75) 537  Kurokawa, K., see Kulsukawa, H. (75) 537  Kurokawa, K., see Kulsukawa, H. (75) 537	Koide, N., see Komatsu, Y.	(74) 513
Koizumi, K., K. Sugita, K. Voshioka and T. Saitoh, Performance improvement of a static concentrator module with an asymmetric v-groove backsheet structure (75) 623 (75) 411 (	Koizumi, H., see Matsukawa, H.	(75) 537
Kojma, N., see Fahim, N.F. Komatsu, Y., N. Koide, MJ. Yang, T. Nakano, Y. Nagano, K. Igarashi, K. Yoshida, K. Yano, T. Hayakawa, H. Taniguchi, M. Shimizu and H. Takiguchi, a-Si/me-Si hybrid solar cell using silicon sheet substrate Komatsu, Y., see Yamamoto, H. Komatsu, Y., see Yamamoto, H. Komoda, M., see Nira, K. (74) 525 Komoda, M., see Nira, K. (74) 247 Komoto, K., see Menna, P. Konagai, M., see Fujisaki, T. Konagai, M., see Fujisaki, T. Konado, M., see Miyahara, H. Kondo, M., see Miyahara, H. Kondo, M., see Suski, S. Kondo, M., see Nakashima, T. Kondo, M., see Nasuno, Y. Kondo, M., see Nasuno, Y. Kondo, M., see Nasuno, Y. Kondo, M., see Wada, T. Konig, D. and G. Ebest, Novel external field source by localization of electrons for improvement of solar cells König, D. and G. Ebest, New contact frame design for minimizing losses due to edge recombination and grid-induced shading Kopecek, R., see Peter, K. Kosaka, M., see Uda, H. Kosakishi, K., see Matsukawa, H. Koshiishi, K., see Matsukawa, H. Koshiishi, K., see Matsukawa, H. Koshiishi, K., see Matsukawa, H. Kozuma, S., see Yagi, Y. Kozuma, S., see Neu, W. Kozili, T., J. Kitao, K. Mori, N. Yoshida and S. Nonomura, Temperature dependence of absorption coeflicient spectra for µc-Si films by resonant photothermal bending spectroscopy Kurokawa, K., see Ishikawa, T. Kurokawa, K., see Ishikawa, T. Kurokawa, K., see Ishikawa, T. Kurokawa, K., see Matsukawa, H.  Kozawa, K., see Ishikawa, T. Kurokawa, K., see Matsukawa, H.  Kozawa, K., see Ishikawa, T. Kurokawa, K., see Matsukawa, H.	Koizumi, K., see Yoshioka, K.	(75) 373
Kojma, N., see Fahim, N.F. Komatsu, Y., N. Koide, MJ. Yang, T. Nakano, Y. Nagano, K. Igarashi, K. Yoshida, K. Yano, T. Hayakawa, H. Taniguchi, M. Shimizu and H. Takiguchi, a-Si me-Si hybrid solar cell using silicon sheet substrate  Komatsu, Y., see Yamamoto, H. Komoto, K., see Wana, P. Komoda, M., see Niira, K. Komoto, K., see Menna, P. Konagai, M., see Fujisaki, T. Konagai, M., see Tokita, Y. Kondo, M., see Nakashima, T. Kondo, M., see Nauno, Y. Kondo, M., see Wada, T. Kondo, M., see Mase, H. König, D. and G. Ebest, Novel external field source by localization of electrons for improvement of solar cells König, D. and G. Ebest, New contact frame design for minimizing losses due to edge recombination and grid-induced shading Kopecck, R., see Peter, K. Kosaka, M., see Uda, H. Koshiishi, K., see Matsukawa, H. Koshiishi, K., see Matsukawa, H. Kre, J., M. Zeman, F. Smole, J.W. Metselaar and M. Topič, Analysis of light scattering in a-SitH-based solar cells with rough interfaces Kress, A., see Neu, W. Kress, A., see Neu, W. Kroll, U., see Meier, J. Kunii, T., J. Kitao, K. Mori, N. Yoshida and S. Nonomura, Temperature dependence of absorption coeflicient spectra for µe-Si films by resonant photothermal bending spectroscopy Kurokawa, K., see Ishikawa, T. Kurokawa, K., see Matsukawa, H. (75) 537	Koizumi, K., K. Sugita, K. Voshioka and T. Saitoh, Performance improvement of a static	
Komatsu, Y., N. Koide, MJ. Yang, T. Nakano, Y. Nagano, K. Igarashi, K. Yoshida, K. Yano, T. Hayakawa, H. Taniguchi, M. Shimizu and H. Takiguchi, a-Si me-Si hybrid solar cell using silicon sheet substrate  (74) 513  Komatsu, Y., see Yamamoto, H. (74) 525  Komoda, M., see Niira, K. (74) 247  Komoto, K., see Menna, P. (75) 519  Konagai, M., see Fujisaki, T. (74) 331  Konagai, M., see Tujisaki, T. (74) 331  Konagai, M., see Tokita, Y. (75) 9  Kondo, M., see Miyahara, H. (74) 429  Kondo, M., see Makashima, T. (74) 429  Kondo, M., see Nasuno, Y. (74) 497  Kondo, M., see Nasuno, Y. (74) 497  Kondo, M., see Wada, T. (74) 533  Kondo, M., see Wada, T. (74) 547  Konig, D. and G. Ebest, Novel external field source by localization of electrons for improvement of solar cells  Kopecek, R., see Matsukawa, H. (75) 335  König, D. and G. Ebest, New contact frame design for minimizing losses due to edge recombination and grid-induced shading  (75) 381  Kopecek, R., see Veter, K. (74) 219  Kosaka, M., see Uda, H. (75) 537  Kozuma, S., see Yagi, Y. (75) 655  Krauser, J., see Matsukawa, H. (75) 37  Krei, J., M. Zeman, F. Smole, J.W. Metselaar and M. Topič, Analysis of light scattering in a-SiH-based solar cells with rough interfaces  Kress, A., see Neu, W. (74) 401  Kress, A., see Neu, W. (75) 17  Kres, J., M. Zeman, F. Smole, J.W. Metselaar and M. Topič, Analysis of light scattering in a-SiH-based solar cells with rough interfaces  Kress, A., see Neu, W. (74) 401  Kress, A., see Neu, W. (75) 537  Kunii, T., J. Kitao, K. Mori, N. Yoshida and S. Nonomura, Temperature dependence of absorption coefficient spectra for µc-Si films by resonant photothermal bending spectroscopy  (74) 415  Kurokawa, K., see Ito, M.  (75) 537	concentrator module with an asymmetric v-groove backsheet structure	(75) 623
T. Hayakawa, H. Taniguchi, M. Shimizu and H. Takiguchi, a-Si me-Si hybrid solar cell using silicon sheet substrate  Komatsu, Y., see Vamamoto, H.  Komatsu, Y., see Vamamoto, H.  Komoda, M., see Niira, K.  Komoto, K., see Menna, P.  Konagai, M., see Fujisaki, T.  Konagai, M., see Fujisaki, T.  Konagai, M., see Tokita, Y.  Kondo, M., see Miyahara, H.  Kondo, M., see Nakashima, T.  Kondo, M., see Wada, T.  Kondo, M., see Wada, T.  Kondo, M., see Wada, T.  Konig, D. and G. Ebest, Novel external field source by localization of electrons for improvement of solar cells  König, D. and G. Ebest, New contact frame design for minimizing losses due to edge recombination and grid-induced shading  Kopecek, R., see Peter, K.  Kosaka, M., see Uda, H.  Kosaka, M., see Wada, H.  Kosaka, M., see Wada, T.  Kozuma, S., see Yagi, Y.  Kozuma, S., see Neu, W.  Kré, J., M. Zeman, F. Smole, J.W. Metselaar and M. Topič, Analysis of light scattering in a-Si:H-based solar cells with rough interfaces  Kress, A., see Neu, W.  (74) 401  Kress, A., see Neu, W.  (74) 407  Kunii, T., J. Kitao, K. Mori, N. Yoshida and S. Nonomura, Temperature dependence of absorption coefficient spectra for µc-Si films by resonant photothermal bending spectroscopy  Kuroke, Ki., M. Miura, K. Hirano and H. Matsunami, Spatial distribution of minority-carrier lifetime and local concentration of impurities in multicrystalline silicon solar cells  Kurokawa, K., see Ito, M.  Kurokawa, K., see Ito, M.	Kojma, N., see Fahim, N.F.	(75) 411
silicon sheet substrate Komatsu, Y., see Yamamoto, H. Komota, M., see Niira, K. Komota, M., see Niira, K. Komoto, K., see Menna, P. Konagai, M., see Fujisaki, T. Konagai, M., see Tokita, Y. Kondo, M., see Tokita, Y. Kondo, M., see Niivahara, H. Kondo, M., see Nisahima, T. Kondo, M., see Suzuki, S. Kondo, M., see Nasuno, Y. Kondo, M., see Nasuno, Y. Kondo, M., see Wada, T. Kopeck, R., see Watsukawa, H. Kopeck, R., see Watsukawa, H. Koruma, S., see Vagi, Y. Koraser, J., see Eisele, W. Krauser, J., see Watsukawa, T. Kurokawa, K., see Nee, W. Kurokawa, K., see Ito, M. Kurokawa, K., see Ito, M. Kurokawa, K., see Ito, M. Kurokawa, K., see Watsukawa, T. Kurokawa, K., see Matsukawa, H.  (75) 537 Kurokawa, K., see Matsukawa, H.	Komatsu, Y., N. Koide, MJ. Yang, T. Nakano, Y. Nagano, K. Igarashi, K. Yoshida, K. Yano,	
Komatsu, Y., see Yamamoto, H. Komoda, M., see Niira, K. Komodo, K., see Menna, P. Konagai, M., see Fujisaki, T. Konagai, M., see Fujisaki, T. Konagai, M., see Fujisaki, T. Kondo, M., see Miyahara, H. Kondo, M., see Nakashima, T. Kondo, M., see Suzuki, S. Kondo, M., see Suzuki, S. Kondo, M., see Wada, T. Kondo, M., see Peter, K.  Kosaka, M., see Peter, K.  (75) 335 Kondo, M., see Peter, K.  (75) 337 Kozuma, S., see Yagi, Y. Kro, J., M. Zeman, F. Smole, J.W. Metselaar and M. Topič, Analysis of light scattering in a-Si-H-based solar cells with rough interfaces  Kress, A., see Neu, W.  Krol, J., Kitao, K. Mori, N. Yoshida and S. Nonomura, Temperature dependence of absorption coefficient spectra for µc-Si films by resonant photothermal bending spectroscopy  (74) 415 Kurobe, Ki., M. Miura, K. Hirano and H. Matsunami, Spatial distribution of minority-carrier lifetime and local concentration of impurities in multicrystalline silicon solar cells  Kurokawa, K., see Ito, M.  Kurokawa, K., see Ito, M.  (75) 537	T. Hayakawa, H. Taniguchi, M. Shimizu and H. Takiguchi, a-Si/mc-Si hybrid solar cell using	
Komoda, M., see Niira, K.         (74) 247           Komoto, K., see Menna, P.         (75) 519           Konagai, M., see Fujisaki, T.         (74) 331           Konagai, M., see Tokita, Y.         (75) 9           Kondo, M., see Miyahara, H.         (74) 351           Kondo, M., see Nakashima, T.         (74) 429           Kondo, M., see Suzuki, S.         (74) 489           Kondo, M., see Wada, T.         (74) 533           Kondo, M., see Wada, T.         (74) 547           König, D. and G. Ebest, Novel external field source by localization of electrons for improvement of solar cells         (75) 335           König, D. and G. Ebest, New contact frame design for minimizing losses due to edge recombination and grid-induced shading         (75) 381           Kopecek, R., see Peter, K.         (74) 219           Kosaka, M., see Uda, H.         (75) 219           Koshiishi, K., see Matsukawa, H.         (75) 219           Krex, J., M. Zeman, F. Smole, J.W. Metselaar and M. Topič, Analysis of light scattering in a-SiH-based solar cells with rough interfaces         (74) 401           Kress, A., see Neu, W.         (74) 139           Kroll, U., see Meier, J.         (74) 457           Kunii, T., J. Kitao, K. Mori, N. Yoshida and S. Nonomura, Temperature dependence of absorption coefficient spectra for µc-Si films by resonant photothermal bending spectro-scopy         (74) 415	silicon sheet substrate	(74) 513
Komoto, K., see Menna, P. Konagai, M., see Fujisaki, T. Konagai, M., see Tokita, Y. Kondo, M., see Miyahara, H. Kondo, M., see Miyahara, H. Kondo, M., see Nasuno, T. Kondo, M., see Nasuno, Y. Kondo, M., see Nasuno, Y. Kondo, M., see Wada, T. Kondo, M., see Wada, T. Kondo, M., see Wada, T. Konig, D. and G. Ebest, Novel external field source by localization of electrons for improvement of solar cells Kopacek, R., see Peter, K. Konig, D. and G. Ebest, New contact frame design for minimizing losses due to edge recombination and grid-induced shading Kopecek, R., see Peter, K. Kosaka, M., see Uda, H. Koshiishi, K., see Matsukawa, H. Koshiishi, K., see Matsukawa, H. Koshiishi, K., see Natsukawa, H. Krauser, J., see Eisele, W. Krauser, J., see Eisele, W. Krauser, J., see Eisele, W. Krauser, J., see Neu, W. Kroll, U., see Meier, J. Kunii, T., J. Kitao, K. Mori, N. Yoshida and S. Nonomura, Temperature dependence of absorption coefficient spectra for µc-Si films by resonant photothermal bending spectroscopy Kurokawa, K., see Ishikawa, T. Kurokawa, K., see Matsukawa, H. (75) 537 Kurokawa, K., see Ito, M.	Komatsu, Y., see Yamamoto, H.	(74) 525
Konagai, M., see Fujisaki, T.  Konagai, M., see Tokita, Y.  Kondo, M., see Miyahara, H.  Kondo, M., see Nakashima, T.  Kondo, M., see Vada, S.  Kondo, M., see Wada, T.  Kondo, M., see Wada, T.  Kondo, M., see Mase, H.  König, D. and G. Ebest, Novel external field source by localization of electrons for improvement of solar cells  König, D. and G. Ebest, New contact frame design for minimizing losses due to edge recombination and grid-induced shading  Kopecek, R., see Peter, K.  Koshiishi, K., see Matsukawa, H.  Koshiishi, K., see Matsukawa, H.  Koshiishi, K., see Matsukawa, H.  Kozuma, S., see Yagi, Y.  Krä, J., M. Zeman, F. Smole, J.W. Metselaar and M. Topič, Analysis of light scattering in a-SizH-based solar cells with rough interfaces  Kress, A., see Neu, W.  Kroll, U., see Meier, J.  Kunii, T., J. Kitao, K. Mori, N. Yoshida and S. Nonomura, Temperature dependence of absorption coefficient spectra for µc-Si films by resonant photothermal bending spectroscopy  Kurobe, Ki., M. Miura, K. Hirano and H. Matsunami, Spatial distribution of minority-carrier lifetime and local concentration of impurities in multicrystalline silicon solar cells  Kurokawa, K., see Ishikawa, T.  Kurokawa, K., see Ishikawa, T.  Kurokawa, K., see Matsukawa, H.  (74) 537	Komoda, M., see Niira, K.	(74) 247
Konagai, M., see Tokita, Y. Kondo, M., see Miyahara, H. Kondo, M., see Nakashima, T. Kondo, M., see Nakashima, T. Kondo, M., see Suzuki, S. Kondo, M., see Suzuki, S. Kondo, M., see Wada, T. Kondo, M., see Wada, T. Kondo, M., see Wada, T. Kondo, M., see Mase, H. Konig, D. and G. Ebest, Novel external field source by localization of electrons for improvement of solar cells König, D. and G. Ebest, New contact frame design for minimizing losses due to edge recombination and grid-induced shading Kopecek, R., see Peter, K. Kosaka, M., see Uda, H. Koshiishi, K., see Matsukawa, H. Koshiishi, K., see Matsukawa, H. Kozuma, S., see Yagi, Y. Kozuma, S., see Yagi, Y. Kré, J., M. Zeman, F. Smole, J.W. Metselaar and M. Topič, Analysis of light scattering in a-Si:H-bused solar cells with rough interfaces Kress, A., see Neu, W. Kroll, U., see Meier, J. Kunii, T., J. Kitao, K. Mori, N. Yoshida and S. Nonomura, Temperature dependence of absorption coeflicient spectra for µc-Si films by resonant photothermal bending spectroscopy Kunobe, Ki., M. Miura, K. Hirano and H. Matsunami, Spatial distribution of minority-carrier lifetime and local concentration of impurities in multicrystalline silicon solar cells Kurokawa, K., see Ishikawa, T. Kurokawa, K., see Ishikawa, H.  (75) 537	Komoto, K., see Menna, P.	(75) 519
Kondo, M., see Miyahara, H.  Kondo, M., see Nakashima, T.  Kondo, M., see Suzuki, S.  Kondo, M., see Nasuno, Y.  Kondo, M., see Wada, T.  Kondo, M., see Wada, T.  König, D. and G. Ebest, Novel external field source by localization of electrons for improvement of solar cells  König, D. and G. Ebest, New contact frame design for minimizing losses due to edge recombination and grid-induced shading  Köpecek, R., see Peter, K.  Kosaka, M., see Uda, H.  Koshiishi, K., see Matsukawa, H.  Kozuma, S., see Yagi, Y.  Kozuma, S., see Yagi, Y.  Kozuma, S., see Yagi, Y.  Krauser, J., see Eisele, W.  Krauser, J., see Eisele, W.  Kroll, U., see Meier, J.  Kunii, T., J. Kitao, K. Mori, N. Yoshida and S. Nonomura, Temperature dependence of absorption coefficient spectra for μc-Si films by resonant photothermal bending spectroscopy  Kurobe, Ki., M. Miura, K. Hirano and H. Matsunami, Spatial distribution of minority-carrier lifetime and local concentration of impurities in multicrystalline silicon solar cells  Kurokawa, K., see Ishikawa, T.  Kurokawa, K., see Ishikawa, T.  Kurokawa, K., see Matsukawa, H.  (74) 537  Kurokawa, K., see Matsukawa, H.	Konagai, M., see Fujisaki, T.	(74) 331
Kondo, M., see Nakashima, T.(74) 429Kondo, M., see Nasuno, Y.(74) 497Kondo, M., see Wada, T.(74) 533Kondo, M., see Mase, H.(74) 547König, D. and G. Ebest, Novel external field source by localization of electrons for improvement of solar cells(75) 335König, D. and G. Ebest, New contact frame design for minimizing losses due to edge recombination and grid-induced shading(75) 381Kopecek, R., see Peter, K.(74) 219Kosaka, M., see Uda, H.(75) 219Koshiishi, K., see Matsukawa, H.(75) 537Kozuma, S., see Yagi, Y.(75) 655Krauser, J., see Eisele, W.(75) 17Krê, J., M. Zeman, F. Smole, J.W. Metselaar and M. Topič, Analysis of light scattering in a-Si:H-based solar cells with rough interfaces(74) 401Kress, A., see Neu, W.(74) 139Kroll, U., see Meier, J.(74) 401Kunii, T., J. Kitao, K. Mori, N. Yoshida and S. Nonomura, Temperature dependence of absorption coefficient spectra for μc-Si films by resonant photothermal bending spectroscopy(74) 415Kurobe, Ki., M. Miura, K. Hirano and H. Matsunami, Spatial distribution of minority-carrier lifetime and local concentration of impurities in multicrystalline silicon solar cells(74) 183Kurokawa, K., see Ishikawa, T.(75) 529Kurokawa, K., see Matsukawa, H.(75) 537	Konagai, M., see Tokita, Y.	(75) 9
Kondo, M., see Suzuki, S.(74) 489Kondo, M., see Nasuno, Y.(74) 497Kondo, M., see Wada, T.(74) 533Kondo, M., see Mase, H.(74) 547König, D. and G. Ebest, Novel external field source by localization of electrons for improvement of solar cells(75) 335König, D. and G. Ebest, New contact frame design for minimizing losses due to edge recombination and grid-induced shading(75) 381Kopecek, R., see Peter, K.(74) 219Kosaka, M., see Uda, H.(75) 219Koshiishi, K., see Matsukawa, H.(75) 537Kozuma, S., see Yagi, Y.(75) 655Krauser, J., see Eisele, W.(75) 17Kré, J., M. Zeman, F. Smole, J.W. Metselaar and M. Topič, Analysis of light scattering in a-Si:H-bused solar cells with rough interfaces(74) 401Kress, A., see Neu, W.(74) 139Kroll, U., see Meier, J.(74) 437Kumii, T., J. Kitao, K. Mori, N. Yoshida and S. Nonomura, Temperature dependence of absorption coefficient spectra for μc-Si films by resonant photothermal bending spectroscopy(74) 415Kurobe, Ki., M. Miura, K. Hirano and H. Matsunami, Spatial distribution of minority-carrier lifetime and local concentration of impurities in multierystalline silicon solar cells(74) 183Kurokawa, K., see Ishikawa, T.(75) 529Kurokawa, K., see Matsukawa, H.(75) 537	Kondo, M., see Miyahara, H.	(74) 351
Kondo, M., see Nasuno, Y.  Kondo, M., see Wada, T.  König, D. and G. Ebest, Novel external field source by localization of electrons for improvement of solar cells  König, D. and G. Ebest, New contact frame design for minimizing losses due to edge recombination and grid-induced shading  Kopecek, R., see Peter, K.  Koshiishi, K., see Matsukawa, H.  Koshiishi, K., see Matsukawa, H.  Koshiishi, K., see Matsukawa, H.  Krē, J., M. Zeman, F. Smole, J.W. Metselaar and M. Topič, Analysis of light scattering in a-SitH-bused solar cells with rough interfaces  Krell, U., see Neier, J.  Kroll, U., see Meier, J.  Kunii, T., J. Kitao, K. Mori, N. Yoshida and S. Nonomura, Temperature dependence of absorption coefficient spectra for μc-Si films by resonant photothermal bending spectroscopy  Kurobe, Ki., M. Miura, K. Hirano and H. Matsunami, Spatial distribution of minority-carrier lifetime and local concentration of impurities in multicrystalline silicon solar cells  Kurokawa, K., see Ishikawa, T.  Kurokawa, K., see Ishikawa, T.  Kurokawa, K., see Matsukawa, H.  (74) 537	Kondo, M., see Nakashima, T.	(74) 429
Kondo, M., see Wada, T.(74) 533Kondo, M., see Mase, H.(74) 547König, D. and G. Ebest, Novel external field source by localization of electrons for improvement of solar cells(75) 335König, D. and G. Ebest, New contact frame design for minimizing losses due to edge recombination and grid-induced shading(75) 381Kopecek, R., see Peter, K.(74) 219Kossaka, M., see Uda, H.(75) 219Koshiishi, K., see Matsukawa, H.(75) 537Kozuma, S., see Yagi, Y.(75) 655Krauser, J., see Eisele, W.(75) 17Krē, J., M. Zeman, F. Smole, J.W. Metselaar and M. Topič, Analysis of light scattering in a-Si:H-based solar cells with rough interfaces(74) 401Kress, A., see Neu, W.(74) 139Kroll, U., see Meier, J.(74) 457Kunii, T., J. Kitao, K. Mori, N. Yoshida and S. Nonomura, Temperature dependence of absorption coeflicient spectra for μc-Si films by resonant photothermal bending spectroscopy(74) 415Kurobe, Ki., M. Miura, K. Hirano and H. Matsunami, Spatial distribution of minority-carrier lifetime and local concentration of impurities in multicrystalline silicon solar cells(74) 183Kurokawa, K., see Itshikawa, T.(75) 529Kurokawa, K., see Ito, M.(75) 507Kurokawa, K., see Matsukawa, H.(75) 537	Kondo, M., see Suzuki, S.	(74) 489
Kondo, M., see Mase, H.(74) 547König, D. and G. Ebest, Novel external field source by localization of electrons for improvement of solar cells(75) 335König, D. and G. Ebest, New contact frame design for minimizing losses due to edge recombination and grid-induced shading(75) 381Kopecek, R., see Peter, K.(74) 219Kosaka, M., see Uda, H.(75) 219Koshiishi, K., see Matsukawa, H.(75) 537Kozuma, S., see Yagi, Y.(75) 655Krauser, J., see Eisele, W.(75) 17Krē, J., M. Zeman, F. Smole, J.W. Metselaar and M. Topič, Analysis of light scattering in a-Si:H-based solar cells with rough interfaces(74) 401Kress, A., see Neu, W.(74) 139Kroll, U., see Meier, J.(74) 457Kunii, T., J. Kitao, K. Mori, N. Yoshida and S. Nonomura, Temperature dependence of absorption coefficient spectra for μc-Si films by resonant photothermal bending spectroscopy(74) 415Kurobe, Ki., M. Miura, K. Hirano and H. Matsunami, Spatial distribution of minority-carrier lifetime and local concentration of impurities in multicrystalline silicon solar cells(74) 183Kurokawa, K., see Ito, M.(75) 529Kurokawa, K., see Matsukawa, H.(75) 537	Kondo, M., see Nasuno, Y.	(74) 497
König, D. and G. Ebest, Novel external field source by localization of electrons for improvement of solar cells  König, D. and G. Ebest, New contact frame design for minimizing losses due to edge recombination and grid-induced shading  Kopecek, R., see Peter, K.  Kosaka, M., see Uda, H.  Koshiishi, K., see Matsukawa, H.  Kozuma, S., see Yagi, Y.  Kozuma, S., see Yagi, Y.  Krauser, J., see Eisele, W.  Krauser, J., see Eisele, W.  Kress, A., see Neu, W.  Kress, A., see Neu, W.  Kroll, U., see Meier, J.  Kunii, T., J. Kitao, K. Mori, N. Yoshida and S. Nonomura, Temperature dependence of absorption coefficient spectra for μc-Si films by resonant photothermal bending spectroscopy  Kurobe, Ki., M. Miura, K. Hirano and H. Matsunami, Spatial distribution of minority-carrier lifetime and local concentration of impurities in multicrystalline silicon solar cells  Kurokawa, K., see Ito, M.  Kurokawa, K., see Ito, M.  (75) 537	Kondo, M., see Wada, T.	(74) 533
of solar cells  König, D. and G. Ebest, New contact frame design for minimizing losses due to edge recombination and grid-induced shading  Kopecek, R., see Peter, K.  Kosaka, M., see Uda, H.  Koshiishi, K., see Matsukawa, H.  Kozuma, S., see Yagi, Y.  Kozuma, S., see Yagi, Y.  Krč, J., M. Zeman, F. Smole, J.W. Metselaar and M. Topič, Analysis of light scattering in a-Si:H-based solar cells with rough interfaces  Kress, A., see Neu, W.  Kroll, U., see Meier, J.  Kunii, T., J. Kitao, K. Mori, N. Yoshida and S. Nonomura, Temperature dependence of absorption coefficient spectra for μc-Si films by resonant photothermal bending spectroscopy  Kurobe, Ki., M. Miura, K. Hirano and H. Matsunami, Spatial distribution of minority-carrier lifetime and local concentration of impurities in multicrystalline silicon solar cells  Kurokawa, K., see Ishikawa, T.  Kurokawa, K., see Ito, M.  (75) 537	Kondo, M., see Mase, H.	(74) 547
König, D. and G. Ebest, New contact frame design for minimizing losses due to edge recombination and grid-induced shading(75) 381Kopecek, R., see Peter, K.(74) 219Kosaka, M., see Uda, H.(75) 219Koshiishi, K., see Matsukawa, H.(75) 537Kozuma, S., see Yagi, Y.(75) 655Krauser, J., see Eisele, W.(75) 17Krč, J., M. Zeman, F. Smole, J.W. Metselaar and M. Topič, Analysis of light scattering in a-SicH-based solar cells with rough interfaces(74) 401Kress, A., see Neu, W.(74) 139Kroll, U., see Meier, J.(74) 457Kunii, T., J. Kitao, K. Mori, N. Yoshida and S. Nonomura, Temperature dependence of absorption coefficient spectra for μc-Si films by resonant photothermal bending spectroscopy(74) 415Kurobe, Ki., M. Miura, K. Hirano and H. Matsunami, Spatial distribution of minority-carrier lifetime and local concentration of impurities in multicrystalline silicon solar cells(74) 183Kurokawa, K., see Ishikawa, T.(75) 529Kurokawa, K., see Ito, M.(75) 507Kurokawa, K., see Matsukawa, H.(75) 537	König, D. and G. Ebest, Novel external field source by localization of electrons for improvement	
recombination and grid-induced shading  Kopecek, R., see Peter, K.  (74) 219  Kosaka, M., see Uda, H.  Koshiishi, K., see Matsukawa, H.  Kozuma, S., see Yagi, Y.  Kri, J., see Eisele, W.  Kré, J., M. Zeman, F. Smole, J.W. Metselaar and M. Topič, Analysis of light scattering in a-SitH-based solar cells with rough interfaces  Kroll, U., see Meier, J.  Kroll, U., see Meier, J.  Kunii, T., J. Kitao, K. Mori, N. Yoshida and S. Nonomura, Temperature dependence of absorption coefficient spectra for µc-Si films by resonant photothermal bending spectroscopy  Kurobe, Ki., M. Miura, K. Hirano and H. Matsunami, Spatial distribution of minority-carrier lifetime and local concentration of impurities in multicrystalline silicon solar cells  Kurokawa, K., see Ishikawa, T.  Kurokawa, K., see Ito, M.  Kurokawa, K., see Matsukawa, H.  (75) 537	of solar cells	(75) 335
Kopecek, R., see Peter, K.(74) 219Kosaka, M., see Uda, H.(75) 219Koshiishi, K., see Matsukawa, H.(75) 537Kozuma, S., see Yagi, Y.(75) 655Krauser, J., see Eisele, W.(75) 17Krέ, J., M. Zeman, F. Smole, J.W. Metselaar and M. Topič, Analysis of light scattering in a-Si:H-based solar cells with rough interfaces(74) 401Kress, A., see Neu, W.(74) 139Kroll, U., see Meier, J.(74) 457Kunii, T., J. Kitao, K. Mori, N. Yoshida and S. Nonomura, Temperature dependence of absorption coefficient spectra for μc-Si films by resonant photothermal bending spectroscopy(74) 415Kurobe, Ki., M. Miura, K. Hirano and H. Matsunami, Spatial distribution of minority-carrier lifetime and local concentration of impurities in multicrystalline silicon solar cells(74) 183Kurokawa, K., see Ishikawa, T.(75) 529Kurokawa, K., see Ito, M.(75) 507Kurokawa, K., see Matsukawa, H.(75) 537	König, D. and G. Ebest, New contact frame design for minimizing losses due to edge	1
Kosaka, M., see Uda, H.  Koshiishi, K., see Matsukawa, H.  Kozuma, S., see Yagi, Y.  Kri, J., M. Zeman, F. Smole, J.W. Metselaar and M. Topič, Analysis of light scattering in a-Si:H-based solar cells with rough interfaces  Kroll, U., see Meier, J.  Kunii, T., J. Kitao, K. Mori, N. Yoshida and S. Nonomura, Temperature dependence of absorption coefficient spectra for μc-Si films by resonant photothermal bending spectroscopy  Kurobe, Ki., M. Miura, K. Hirano and H. Matsunami, Spatial distribution of minority-carrier lifetime and local concentration of impurities in multicrystalline silicon solar cells  Kurokawa, K., see Ito, M.  Kurokawa, K., see Matsukawa, H.  (75) 537	recombination and grid-induced shading	(75) 381
Koshiishi, K., see Matsukawa, H.  Kozuma, S., see Yagi, Y.  Kozuma, S., see Yagi, Y.  Kré, J., M. Zeman, F. Smole, J.W. Metselaar and M. Topič, Analysis of light scattering in a-Si:H-based solar cells with rough interfaces  Kress, A., see Neu, W.  Kroll, U., see Meier, J.  Kunii, T., J. Kitao, K. Mori, N. Yoshida and S. Nonomura, Temperature dependence of absorption coefficient spectra for μc-Si films by resonant photothermal bending spectroscopy  Kurobe, Ki., M. Miura, K. Hirano and H. Matsunami, Spatial distribution of minority-carrier lifetime and local concentration of impurities in multicrystalline silicon solar cells  Kurokawa, K., see Ishikawa, T.  Kurokawa, K., see Ito, M.  Kurokawa, K., see Matsukawa, H.	Kopecek, R., see Peter, K.	(74) 219
Kozuma, S., see Yagi, Y.(75) 655Krauser, J., see Eisele, W.(75) 17Krê, J., M. Zeman, F. Smole, J.W. Metselaar and M. Topič, Analysis of light scattering in a-Si:H-based solar cells with rough interfaces(74) 401Kress, A., see Neu, W.(74) 139Kroll, U., see Meier, J.(74) 457Kunii, T., J. Kitao, K. Mori, N. Yoshida and S. Nonomura, Temperature dependence of absorption coefficient spectra for μc-Si films by resonant photothermal bending spectroscopy(74) 415Kurobe, Ki., M. Miura, K. Hirano and H. Matsunami, Spatial distribution of minority-carrier lifetime and local concentration of impurities in multicrystalline silicon solar cells(74) 183Kurokawa, K., see Ishikawa, T.(75) 529Kurokawa, K., see Ito, M.(75) 507Kurokawa, K., see Matsukawa, H.(75) 537	Kosaka, M., see Uda, H.	(75) 219
Krauser, J., see Eisele, W.  Kré, J., M. Zeman, F. Smole, J.W. Metselaar and M. Topič, Analysis of light scattering in a-Si:H-based solar cells with rough interfaces  Kress, A., see Neu, W.  Kroll, U., see Meier, J.  Kunii, T., J. Kitao, K. Mori, N. Yoshida and S. Nonomura, Temperature dependence of absorption coefficient spectra for μc-Si films by resonant photothermal bending spectroscopy  Kurobe, Ki., M. Miura, K. Hirano and H. Matsunami, Spatial distribution of minority-carrier lifetime and local concentration of impurities in multicrystalline silicon solar cells  Kurokawa, K., see Ishikawa, T.  Kurokawa, K., see Ito, M.  (75) 529  Kurokawa, K., see Matsukawa, H.	Koshiishi, K., see Matsukawa, H.	(75) 537
<ul> <li>Krč, J., M. Zeman, F. Smole, J.W. Metselaar and M. Topič, Analysis of light scattering in a-Si:H-based solar cells with rough interfaces</li> <li>Kress, A., see Neu, W.</li> <li>Kroll, U., see Meier, J.</li> <li>Kunii, T., J. Kitao, K. Mori, N. Yoshida and S. Nonomura, Temperature dependence of absorption coefficient spectra for μc-Si films by resonant photothermal bending spectroscopy</li> <li>Kurobe, Ki., M. Miura, K. Hirano and H. Matsunami, Spatial distribution of minority-carrier lifetime and local concentration of impurities in multicrystalline silicon solar cells</li> <li>Kurokawa, K., see Ishikawa, T.</li> <li>Kurokawa, K., see Ito, M.</li> <li>Kurokawa, K., see Matsukawa, H.</li> <li>(75) 537</li> </ul>	Kozuma, S., see Yagi, Y.	(75) 655
a-Si:H-based solar cells with rough interfaces (74) 401 Kress, A., see Neu, W. (74) 139 Kroll, U., see Meier, J. (74) 457 Kunii, T., J. Kitao, K. Mori, N. Yoshida and S. Nonomura, Temperature dependence of absorption coefficient spectra for µc-Si films by resonant photothermal bending spectroscopy (74) 415 Kurobe, Ki., M. Miura, K. Hirano and H. Matsunami, Spatial distribution of minority-carrier lifetime and local concentration of impurities in multicrystalline silicon solar cells (74) 183 Kurokawa, K., see Ishikawa, T. (75) 529 Kurokawa, K., see Ito, M. (75) 507 Kurokawa, K., see Matsukawa, H. (75) 537	Krauser, J., see Eisele, W.	(75) 17
Kress, A., see Neu, W.  Kroll, U., see Meier, J.  Kunii, T., J. Kitao, K. Mori, N. Yoshida and S. Nonomura, Temperature dependence of absorption coefficient spectra for μc-Si films by resonant photothermal bending spectroscopy  Kurobe, Ki., M. Miura, K. Hirano and H. Matsunami, Spatial distribution of minority-carrier lifetime and local concentration of impurities in multicrystalline silicon solar cells  Kurokawa, K., see Ishikawa, T.  Kurokawa, K., see Ito, M.  Kurokawa, K., see Matsukawa, H.  (74) 139  (74) 457	Krč, J., M. Zeman, F. Smole, J.W. Metselaar and M. Topič, Analysis of light scattering in	1
<ul> <li>Kroll, U., see Meier, J.</li> <li>Kunii, T., J. Kitao, K. Mori, N. Yoshida and S. Nonomura, Temperature dependence of absorption coefficient spectra for μc-Si films by resonant photothermal bending spectroscopy</li> <li>Kurobe, Ki., M. Miura, K. Hirano and H. Matsunami, Spatial distribution of minority-carrier lifetime and local concentration of impurities in multicrystalline silicon solar cells</li> <li>Kurokawa, K., see Ishikawa, T.</li> <li>Kurokawa, K., see Ito, M.</li> <li>Kurokawa, K., see Matsukawa, H.</li> <li>(74) 415</li> <li>(74) 415</li> <li>(74) 415</li> <li>(75) 529</li> <li>(75) 529</li> <li>(75) 537</li> </ul>	a-Si:H-based solar cells with rough interfaces	(74) 401
<ul> <li>Kunii, T., J. Kitao, K. Mori, N. Yoshida and S. Nonomura, Temperature dependence of absorption coefficient spectra for μc-Si films by resonant photothermal bending spectroscopy (74) 415</li> <li>Kurobe, Ki., M. Miura, K. Hirano and H. Matsunami, Spatial distribution of minority-carrier lifetime and local concentration of impurities in multicrystalline silicon solar cells (74) 183</li> <li>Kurokawa, K., see Ishikawa, T. (75) 529</li> <li>Kurokawa, K., see Ito, M. (75) 507</li> <li>Kurokawa, K., see Matsukawa, H. (75) 537</li> </ul>	Kress, A., see Neu, W.	(74) 139
absorption coefficient spectra for μc-Si films by resonant photothermal bending spectro- scopy (74) 415  Kurobe, Ki., M. Miura, K. Hirano and H. Matsunami, Spatial distribution of minority-carrier lifetime and local concentration of impurities in multierystalline silicon solar cells  Kurokawa, K., see Ishikawa, T. (75) 529  Kurokawa, K., see Ito, M. (75) 507  Kurokawa, K., see Matsukawa, H. (75) 537	Kroll, U., see Meier, J.	(74) 457
Kurobe, Ki., M. Miura, K. Hirano and H. Matsunami, Spatial distribution of minority-carrier lifetime and local concentration of impurities in multicrystalline silicon solar cells  Kurokawa, K., see Ishikawa, T.  Kurokawa, K., see Ito, M.  Kurokawa, K., see Matsukawa, H.  (74) 183  (75) 529  (75) 507  (75) 537		
lifetime and local concentration of impurities in multicrystalline silicon solar cells  Kurokawa, K., see Ishikawa, T.  Kurokawa, K., see Ito, M.  Kurokawa, K., see Matsukawa, H.  (75) 507  Kurokawa, K., see Matsukawa, H.	scopy	(74) 415
Kurokawa, K., see Ishikawa, T.       (75) 529         Kurokawa, K., see Ito, M.       (75) 507         Kurokawa, K., see Matsukawa, H.       (75) 537	Kurobe, Ki., M. Miura, K. Hirano and H. Matsunami, Spatial distribution of minority-carrie	r
Kurokawa, K., see Ito, M.       (75) 507         Kurokawa, K., see Matsukawa, H.       (75) 537	lifetime and local concentration of impurities in multicrystalline silicon solar cells	(74) 183
Kurokawa, K., see Matsukawa, H. (75) 537	Kurokawa, K., see Ishikawa, T.	(75) 529
	Kurokawa, K., see Ito, M.	(75) 507
Kurokawa, K., see Menna, P. (75) 519	Kurokawa, K., see Matsukawa, H.	(75) 537
	Kurokawa, K., see Menna, P.	(75) 519

Kurokawa, K., see Oozeki, T.	(75) 687
Kurokawa, K., see Sugiura, T.	(75) 767
Kurokawa, K., see Tamura, J.	(75) 585
Kurokawa, K., see Yamaguchi, A.	(75) 679
Kushiya, K., see Nagoya, Y.	(75) 163
Kushiya, K., M. Ohshita, I. Hara, Y. Tanaka, B. Sang, Y. Nagoya, M. Tachiyuki and O. Yamase, Yield issues on the fabrication of 30 cm × 30 cm-sized Cu(In,Ga)Sey-based	
thin-film modules	(75) 171
Kushiya, K., see Sang, B.	(75) 179
Kuwabara, N., see Takigawa, K.	(75) 547
Lee, D.Y., B.T. Ahn, K.H. Yoon and J.S. Song, Effect of first-stage temperature on	
Cu(In,Ga)Se <sub>2</sub> solar cells using the evaporation of binary selenide compounds	(75) 73
Lee, D.Y., see Yun, J.H.	(75) 203
Lee, E.J., D.S. Kim and S.H. Lee, Ni/Cu metallization for low-cost high-efficiency PERC cells	(74) 65
Lee, G., see Kim, H.	(74) 323
Lee, HS., H. Okada, A. Wakahara, A. Yoshida, T. Ohshima, H. Itoh, S. Kawakita, M. Imaizumi and S. Matsuda, Effect of proton irradiation on electrical properties of CuInSe <sub>2</sub>	
thin films	(75) 57
Lee, JC., see Seol, JS.	(75) 155
Lee, JH., WC. Song, JS. Yi and YS. Yoo, Characteristics of the CdZnS thin film doped by thermal diffusion of vacuum evaporated indium films	(75) 227
Lee, JH., DG. Lim and JS. Yi, Electrical and optical properties of CdTe films prepared by	
vacuum evaporation with close spacing between source and substrate	(75) 235
Lee, JH., see Lee, SC.	(75) 481
Lee, J.C., K.H. Kang, S.K. Kim, K.H. Yoon, J. Song and I.J. Park, Structural and electrical	
properties of polycrystalline silicon films deposited by hot-wire CVD	(74) 233
Lee, J.C., see Song, H.K.	(75) 145
Lee, J.H., see Parm, I.O.	(74) 97
Lee, K.M., S.H. Lee and Y.K. Kim, Effect of design parameters on the efficiency of the solar cells	
fabricated using SOI structure	(75) 439
Lee, R., see Heo, J.	(75) 193
Lee, SC., JH. Lee, TS. Oh and YH. Kim, Fabrication of tin oxide film by sol-gel method	
for photovoltaic solar cell system	(75) 481
Lee, SY., see Seol, JS.	(75) 155
Lee, S.H., see Lee, E.J.	(74) 65
Lee, S.H., see Parm, I.O.	(74) 97
Lee, S.H., see Kim, H.	(74) 323
Lee, S.H., see Lee, K.M.	(75) 439
Li, E.L., see Yamamoto, A.	(75) 451
Li, G., Q. Yang, Z. Yan, W. Li, S. Zhang, J. Freeouf and J.M. Woodall, Extreme radiation hardness and light-weighted thin-film indium phosphide solar cell and its computer	
simulation	(75) 307
Li, H.B., see Geng, X.H.	(75) 489
Li, W., see Li, G.	(75) 307
Lim, DG., see Lee, JH.	(75) 235
Lim, D.G., see Parm, I.O.	(74) 97
Lüdemann, R., see Biro, D.	(74) 35
Lundszien, D., F. Finger and H. Wagner, A-Si:H buffer in a-SiGe:H solar cells	(74) 365
Luther, J., see Goetzberger, A.	(74)
Lux-Steiner, M., see Eisele, W.	(75) 17
Lux-Steiner, M.C., see Bär, M.	(75) 101
Lux-Steiner, M.Ch., see Rumberg, A.	(75) 1

No. 11 1 - D. A. D. T. C. D. Alberton and J. L. Zhao, Chandra and Anti-	
Maddalena, P., A. Parretta, P. Tortora, P. Altermatt and J. Zhao, Simultaneous optical losses and current measurements in photovoltaic devices at variable angle of the incident light	(75) 397
Malik, M.A., see Chatten, A.J.	(75) 363
Maruyama, E., S. Okamoto, A. Terakawa, W. Shinohara, M. Tanaka and S. Kiyama, Toward	(13) 303
stabilized 10% efficiency of large-area (> 5000 cm <sup>2</sup> ) a-Si/a-Si/Ge tandem solar cells using	
high-rate deposition	(74) 339
Mase, H., M. Kondo and A. Matsuda, Microcrystalline silicon solar cells fabricated on polymer	(14) 22/
substrate	(74) 547
Masuda, A., Y. Ishibashi, K. Uchida, K. Kamesaki, A. Izumi and H. Matsumura, In situ chamber	(,
cleaning using atomic H in catalytic-CVD apparatus for mass production of a-Si:H solar cells	(74) 373
Masuda, A., see Hashimoto, A.	(75) 313
Matsuda, A., see Miyahara, H.	(74) 351
Matsuda, A., see Nakashima, T.	(74) 429
Matsuda, A., see Suzuki, S.	(74) 489
Matsuda, A., see Nasuno, Y.	(74) 497
Matsuda, A., see Mase, H.	(74) 547
Matsuda, A., see Wada, T.	(74) 533
Matsuda, S., see Dharmarasu, N.	(75) 327
Matsuda, S., see Fujita, R.	(75) 319
Matsuda, S., see Khan, A.	(75) 271
Matsuda, S., see Lee, HS.	(75) 57
Matsuda, Y., see Tanaka, T.	(75) 115
Matsukawa, H., K. Koshiishi, H. Koizumi, K. Kurokawa, M. Hamada and L. Bo, Dynamic	
evaluation of maximum power point tracking operation with PV array simulator	(75) 537
Matsumura, H., see Masuda, A.	(74) 373
Matsunami, H., see Kurobe, Ki.	(74) 183
Matsushima, T., T. Setaka and S. Muroyama, Concentrating solar module with horizontal	(75) (0)
reflectors	(75) 603
Matsuura, K., see Muhida, R.	(75) 697
Mazzer, M., see Bushnell, D.B.	(75) 299
Medvedkin, G.A., E.I. Terukov, Y. Hasegawa, K. Hirose and K. Sato, Microdefects and point	
defects optically detected in Cu(In.Ga)Se <sub>2</sub> thin film solar cells exposed to the damp and heating	(75) 127
Medvedkin, G.A., T. Nishi, Y. Katsumata, H. Miyake and K. Sato, Study of point defects in	(73) 127
CuGaSe <sub>2</sub> single crystals by means of electron paramagnetic resonance and photolumines-	
cence	(75) 135
Meguro, T., see Yamamoto, K.	(74) 449
Meier, J., S. Dubail, S. Golay, U. Kroll, S. Faÿ, E. Vallat-Sauvain, L. Feitknecht, J. Dubail and	(13) 415
A. Shah, Microcrystalline silicon and the impact on micromorph tandem solar cells	(74) 457
Meier, J., see Feitknecht, L.	(74) 539
Menna, P., U. Ciorba, F. Pauli, K. Komoto, K. Kato, J. Song and K. Kurokawa, Analysis of the	1
impacts of transferring a photovoltaic modules manufacturing facility	(75) 519
Metselaar, J.W., see Krč, J.	(74) 401
Michira, M., see Muhida, R.	(75) 697
Minagawa, Y., see Muramatsu, SI.	(74) 275
Minagawa, Y., Y. Yazawa and Si. Muramatsu, Influence of doping concentration on	
Ni-induced lateral crystallization of amorphous silicon films	(74) 283
Minemoto, T., Y. Hashimoto, W. Shams-Kolahi, T. Satoh, T. Negami, H. Takakura and	
Y. Hamakawa, Control of conduction band offset in wide-gap Cu(In,Ga)Se2 solar cells	(75) 121
Miura, M., see Kurobe, Ki.	(74) 183
Miyahara, H., M. Takai, T. Nishimoto, M. Kondo and A. Matsuda, Electrode distance	
dependence of photo-induced degradation in hydrogenated amorphous silicon	(74) 351

Miyake, H., see Medvedkin, G.A.	(75) 135
Monna, R., see Debarge, L.	(74) 71
Mori, K., see Kunii, T.	(74) 415
Morita, A., see Aramoto, T.	(75) 211
Moto, A., see Hashimoto, A.	(75) 313
Motohiro, T., see Azuma, H.	(74) 289
Muffler, HJ., see Bär, M.	(75) 101
Muhida, R., M. Park, M. Dakkak, K. Matsuura, A. Tsuyoshi and M. Michira, A maximum	
power point tracking for photovoltaic-SPE system using a maximum current controller	(75) 697
Mukhopadhyay, S., see Ray, S.	(74) 393
Muller, J.C., see Debarge, L.	(74) 71
Müller, J., see Rech, B.	(74) 439
Muramatsu, SL., Y. Minagawa, F. Oka, T. Sasaki and Y. Yazawa, Thin-film c-Si solar cells	
prepared by metal-induced crystallization	(74) 275
Muramatsu, Si., see Minagawa, Y.	(74) 283
Murata, K., T. Yagiura, K. Takeda, M. Tanaka and S. Kiyama, New type of photovoltaic	(, , , =0.
module integrated with roofing material (highly fire-resistant PV tile)	(75) 647
Muroyama, S., see Matsushima, T.	(75) 603
Viuloyama, S., See Viatsusmma, 1.	(12) 002
Nafeh, Abd El-Shafy A., F.H. Fahmy and E.M. Abou El-Zahab, Evaluation of a proper	
controller performance for maximum-power point tracking of a stand-alone PV system	(75) 723
Nagano, Y., see Komatsu, Y.	(74) 513
Nagoya, Y., B. Sang, Y. Fujiwara, K. Kushiya and O. Yamase, Improved performance of	,
Cu(ln,Ga)Se <sub>3</sub> -based submodules with a stacked structure of ZnO window prepared by	
sputtering	(75) 163
Nagova, Y., see Kushiya, K.	(75) 171
Nagoya, Y., see Sang, B.	(75) 179
Naito, K., see Kawamura, H.	(75) 613
Naka, K., see Kawamura, H.	(75) 613
	(74) 519
Nakahata, K., see Isomura, M. Nakajima, A., see Yamamoto, K.	(74) 449
	(75) 767
Nakamura, H., see Sugiura, T.	(12) 101
Nakamura, K., M. Gotoh, T. Fujihara, T. Toyama and H. Okamoto, Influence of CdS window	(75) 185
layer on 2-µm thick CdS/CdTe thin film solar cells	
Nakamura, M., see Yamamoto, A.	(75) 451
Nakamura, S. and A. Yamamoto, Electrodeposited CuInS <sub>2</sub> -based thin-film solar cells	(75) 81
Nakamura, S., see Yamamoto, A.	(75) 451
Nakamura, T., see Yamaguchi, T.	(75) 87
Nakano, T., see Komatsu, Y.	(74) 513
Nakashima, T., M. Kondo and A. Matsuda, Promising window layer of thin film Si solar cell with p-i-n structure prepared by using SiH <sub>2</sub> Cl <sub>2</sub>	(74) 429
Nam, HD., see Seol, JS.	(75) 155
Narayanan, K.L. and M. Yamaguchi, Photovoltaic effects of a:C/C <sub>607</sub> Si (p-i-n) solar cell	
structures	(75) 345
Narayanan, S., Large area multicrystalline silicon solar cells in high volume production	
environment - history, status, new processes, technology transfer issues	(74) 107
Narayanan, S., see Ruby, D.S.	(74) 133
Nasuno, Y., M. Kondo and A. Matsuda, Microcrystalline silicon thin-film solar cells prepared at	
low temperature using PECVD	(74) 497
Negami, T., see Minemoto, T.	(75) 121
Negami, T., see Satoh, T.	(75) 65
Neu, W., A. Kress, W. Jooss, P. Fath and E. Bucher, Low-cost multicrystalline back-contact	
silicon solar cells with screen printed metallization	(74) 139
£ .	

Neuhaus, DH., see Widenborg, P.	(74) 305
Neuhaus, D.H., NP. Harder, S. Oelting, R. Bardos, A.B. Sproul, P. Widenborg a	
A.G. Aberle, Dependence of the recombination in thin-film Si solar cells grown	
ion-assisted deposition on the crystallographic orientation of the substrate	(74) 225
Nguyen, A.K., see Hashimoto, A.	(75) 313
Niira, K., H. Senta, H. Hakuma, M. Komoda, H. Okui, K. Fukui, H. Arimune and K. Shirasav Thin film poly-Si solar cells using PECVD and Cat-CVD with light confinement structure	
RIE	(74) 247
Niiyama, S., see Yamaguchi, T.	(75) 87
Nijs, J., see Szlufcik, J.	(74) 155
Nishi, T., see Medvedkin, G.A.	(75) 135
Nishimoto, T., see Miyahara, H.	(74) 351
Nishioka, K., T. Hatayama, Y. Uraoka, T. Fuyuki, R. Hagihara and M. Watana	
Field-test analysis of PV system output characteristics focusing on mod	
temperature	(75) 665
Nishiyama, Y., see Aramoto, T.	(75) 211
Nonomura, S., see Itoh, T.	(74) 379
Nonomura, S., see Kunii, T.	(74) 415
Nussbaumer, H., see Fath, P.	(74) 127
Oelting, S., see Neuhaus, D.H.	(74) 225
Oh, TS., see Lee, SC.	(75) 481
Ohkawara, G., see Yoshino, K.	(74) 505
Ohno, H., see Kawamura, H.	(75) 613
Ohshima, T., see Dharmarasu, N.	(75) 327
Ohshima, T., see Khan, A.	(75) 271
Ohshima, T., see Lee, HS.	(75) 57
Ohshima, T., see Lee, 11-5. Ohshima, T., see Tanaka, T.	(75) 109
Ohshita, M., see Kushiya, K.	(75) 171
Ohshita, Y., see Khan, A.	(75) 271
Ohshita, Y., T.K. Vu and M. Yamaguchi, Generation of interstitial boron by minority-car	
injection	(75) 405
Ohshita, Y., see Fahim, N.F.	(75) 411
Ohta, K., see Kashiwaba, Y.	(75) 253
Ohtsubo, Y., see Uda, H.	(75) 219
Oka, F., see Muramatsu, SI.	(74) 275
Okada, H., see Lee, HS.	(75) 57
Okada, N. and K. Takigawa, A voltage regulation method for dispersed grid-connected	
systems under high-density connection	(75) 637
Okada, N., see Ishikawa, T.	(75) 529
Okada, N., see Takigawa, K.	(75) 547
Okamoto, H., see Nakamura, K.	(75) 185
Okamoto, S., see Maruyama, E.	(74) 339
Okamoto, Y., see Yamaguchi, T.	(75) 597
Okui, H., see Niira, K.	(74) 247
Oldenkamp, H., see Faiman, D.	(75) 629
Omura, K., see Aramoto, T.	(75) 211
Oozeki, T., T. Izawa, K. Otani and K. Kurokawa, An evaluation method of PV systems	(75) 687
Ose, E., see Sinh, N.D.	(74) 295
Oßwald, D., see Kieliba, T.	(74) 261
Otani, K., see Tamura, J.	(75) 585
Otani, K., see Oozeki, T.	(75) 687
Ozaki, R., see Dhamrin, M.	(74) 203

	(74) 91
Park, GC., see Jeong, WJ.	(75) 93
Park, I.J., see Lee, J.C.	(74) 233
Park, JS., see Yamamoto, S.	(75) 577
Park, M., see Muhida, R.	(75) 697
Park, NG., see Kang, MG.	(75) 475
Park, YJ., see Kang, MG.	(75) 475
Parm, I.O., K. Kim, D.G. Lim, J.H. Lee, J.H. Heo, J. Kim, D.S. Kim, S.H. Lee and J. Yi,	
High-density inductively coupled plasma chemical vapor deposition of silicon nitride for	
solar cell application	(74) 97
Parretta, A., P.P. Altermatt and J. Zhao, Transmittance from photovoltaic materials under	
diffuse light	(75) 387
Parretta, A., see Maddalena, P.	(75) 397
Parretta, A., H. Yakubu, F. Ferrazza, P.P. Altermatt, M.A. Green and J. Zhao, Optical loss of	
photovoltaic modules under diffuse light	(75) 497
Pauli, F., see Menna, P.	(75) 519
Peter, K., R. Kopecek, P. Fath, E. Bucher and C. Zahedi, Thin film silicon solar cells on	
upgraded metallurgical silicon substrates prepared by liquid phase epitaxy	(74) 219
Peters, S., see Biro, D.	(74) 35
Pettenkofer, C., see Eisele, W.	(75) 17
Polak, M., see Katz, E.A.	(75) 421
Powalla, M. and B. Dimmler, Development of large-area CIGS modules	(75) 27
Preu, R., see Biro, D.	(74) 35
	()
Rahardjo, S., see Hadi, H.	(75) 673
Rath, J.K., see Jun, K.H.	(74) 357
Rath, J.K., F.D. Tichelaar and R.E.I. Schropp, Heterogeneous growth of microcrystalline silicon	
germanium	(74) 553
Ray, S., R. Das and A.K. Barua, Performance of double junction a-Si solar cells by using	V V
ZnO:Al films with different electrical and optical properties at the n/metal interface	(74) 387
Ray, S., C. Das, S. Mukhopadhyay and S.C. Saha, Substrate temperature and hydrogen	()
dilution: parameters for amorphous to microcrystalline phase transition in silicon thin	
films	(74) 393
Reber, S., see Kieliba, T.	(74) 261
Rech, B., O. Kluth, T. Repmann, T. Roschek, J. Springer, J. Müller, F. Finger, H. Stiebig and	( ) = 0 .
H. Wagner, New materials and deposition techniques for highly efficient silicon thin film	
solar cells	(74) 439
Rech, B., see Brammer, T.	(74) 469
Reetz, W., see Brammer, T.	(74) 469
Ren, H.Z., see Geng, X.H.	(75) 489
	(74) 439
Repmann, T., see Rech, B.	
Rinke, T.J., see Bergmann, R.B.	(74) 213
Roberts, J.S., see Bushnell, D.B.	(75) 299
Rohatgi, A., see Ebong, A.	(74) 51
Rohatgi, A., V. Yelundur, J. Jeong, A. Ebong, M.D. Rosenblum and J.I. Hanoka, Fundamental	
understanding and implementation of Al-enhanced PECVD SiN, hydrogenation in silicon	.54: 115
ribbons	(74) 117
Rohatgi, A., see Ruby, D.S.	(74) 133
Roschek, T., see Rech, B.	(74) 439
Rosenblum, M.D., see Rohatgi, A.	(74) 117
Ruby, D., see Ebong, A.	(74) 51
Ruby, D.S., S.H. Zaidi, S. Narayanan, B.M. Damiani and A. Rohatgi, Rie-texturing of	
multicrystalline silicon solar cells	(74) 133

by iodine-enhanced chemical vapour deposition for Cuccells	(75) 1
Ryu, KS., see Kang, MG.	(75) 475
Saha, S.C., see Ray, S.	(74) 393
Saitoh, T., see Dhamrin, M.	(74) 203
Saitoh, T., see Hashigami, H.	(75) 351
Saitoh, T., see Yoshioka, K.	(75) 373
Saitoh, T., see Koizumi, K.	(75) 623
Sakuta, K., see Sugiura, T.	(75) 767
Sang, B., see Nagoya, Y.	(75) 163
Sang, B., see Kushiya, K.	(75) 171
Sang, B., Y. Nagoya, K. Kushiya and O. Yamase, MOCVD-ZnO	windows for 30 cm × 30 cm
CIGS-based modules	(75) 179
Sasaki, K., see Yamamoto, S.	(75) 577
Sasaki, T., see Muramatsu, SI.	(74) 275
Sato, K., see Medvedkin, G.A.	(75) 127
Sato, K., see Medvedkin, G.A.	(75) 135
Satoh, T., Y. Hashimoto, S. Shimakawa, S. Hayashi and T. Negami,	
stainless steel substrates covered with insulating layers	(75) 65
Satoh, T., see Minemoto, T.	(75) 121
Sawada, T., see Yamamoto, K.	(74) 449
Scherff, M., see Ulyashin, A.	(74) 195
Schindler, R., see Biro, D.	(74) 35
Schmid, F., see Khattak, C.P.	(74) 77
Schmidt, J., see Bergmann, R.B.	(74) 213
Schönecker, A., see van der Heide, A.S.H.	(74) 43
Schober, R., see Kieliba, T.	(74) 261
Schott, M., see Debarge, L.	(74) 71
Schropp, R.E.I., see Jun, K.H.	(74) 357
Schropp, R.E.L., see Rath, J.K.	(74) 553
Schubert-Bischoff, P., see Eisele, W.	(75) 17
Schultz, O., see Biro, D.	(74) 35
Seki, A., see Yamamoto, A.	(75) 451
Senoussaoui, N., see Brammer, T.	(74) 469
Senta, H., see Niira, K.	(74) 247
Seol, JS., SY. Lee, JC. Lee, HD. Nam and KH. Kim, Electric	
Cu2ZnSnS4 thin films prepared by rf magnetron sputtering pro	
Setaka, T., see Matsushima, T.	(75) 603
Shah, A., see Meier, J.	(74) 457
Shah, A., see Feitknecht, L.	(74) 539
Shams-Kolahi, W., see Minemoto, T.	(75) 121
Shima, M., see Isomura, M.	(74) 519
Shimakawa, S., see Satoh, T.	(75) 65
Shimizu, M., see Komatsu, Y.	(74) 513
Shimizu, M., see Yamamoto, H.	(74) 525
Shinohara, W., see Maruyama, E.	(74) 339
Shirai, H., see Jung, S.	(74) 421
Shirai, H., see Yoshino, K.	(74) 505
Shirasawa, K., see Niira, K.	(74) 247
Shtutina, S., see Katz, E.A.	(75) 421
Siefer, G., see Hein, M.	(75) 277

Sinh, N.D., G. Andrä, F. Falk, E. Ose and J. Bergmann, Optimization of	of lavered laser
crystallization for thin-film crystalline silicon solar cells	(74) 295
Sites, J.R., Quantification of losses in thin-film polycrystalline solar cells	(75) 243
Smole, F., see Krč, J.	(74) 401
Song, H.K., S.G. Kim, H.J. Kim, S.K. Kim, K.W. Kang, J.C. Lee and K.H. Yoon.	Preparation of
CuIn <sub>1</sub> , Ga, Se <sub>2</sub> thin films by sputtering and selenization process	(75) 145
Song, J., see Lee, J.C.	(74) 233
Song, J., see Ito, M.	(75) 507
Song, J., see Menna, P.	(75) 519
Song, J.S., see Lee, D.Y.	(75) 73
Song, WC., see Lee, JH.	(75) 227
Sonomura, H., see Uda, H.	(75) 219
Sontag, D., see Hahn, G.	(74) 57
Spiegel, M., C. Gerhards, F. Huster, W. Jooss, P. Fath and E. Bucher, Indust front contact formation methods for mechanically V-textured multicrystall.	
cells	(74) 175
Spiegel, M., see Hauser, A.	(75) 357
Springer, J., see Rech. B.	(74) 439
Sproul, A.B., see Neuhaus, D.H.	(74) 225
Sproul, A.B., see Widenborg, P.	(74) 305
Stiebig, H., see Brammer, T.	(74) 469
Stiebig, H., see Rech, B.	(74) 439
Stolt, L., see Kessler, J.	(75) 35
Stolt, L., see Wennerberg, J.	(75) 47
Strzhemechny, Y., see Katz, E.A.	(75) 421
Suezaki, T., see Yamamoto, K.	(74) 449
Sugihara, H., see Ito, M.	(75) 507
Sugita, K., see Koizumi, K.	(75) 623
Sugiura, T., T. Yamada, H. Nakamura, M. Umeya, K. Sakuta and K. Kurokawa.	
analyses and evaluation of residential PV systems by Japanese monitoring	
Sun, G.C., J.C. Bourgoin, N. de Angelis, M. Yamaguchi, A. Khan, T. Takamot	
Metastability effects in InGaP solar cells	(75) 293
Suzuki, S., M. Kondo and A. Matsuda, Growth of device grade µc-Si film at o	
PECVD	(74) 489
Suzuki, T., see Yamamoto, K.	(74) 449
Szlufcik, J., F. Duerinckx, J. Horzel, E. Van Kerschaver, H. Dekkers, S. De V	
C. Allebe and J. Nijs, High-efficiency low-cost integral screen-printing	
silicon solar cells	(74) 155
Taberi, M., see Yamaguchi, T.	(75) 597
Tachiyuki, M., see Kushiya, K.	(75) 171
Taira, S., see Isomura, M.	(74) 519
Takaba, Y., see Yamamoto, H.	(74) 525
Takagishi, S., see Hashimoto, A.	(75) 313
Takahashi, M., see Hashimoto, A.	(75) 313
Takahashi, M., see Yamaguchi, A.	(75) 679
Takai, M., see Miyahara, H.	(74) 351
Takakura, H. and Y. Hamakawa, Device simulation and modeling of microc	
solar cells	(74) 479
Takakura, H., see Minemoto, T.	(75) 121
Takakura, H., see Hiraoka, S.	(75) 781
Takamoto, T., see Sun, G.C.	(75) 293
Takamoto, T., see Dharmarasu, N.	(75) 327

Takata, H., see Yamamoto, K.	(74) 449
Takata, M., see Yamamoto, S.	(75) 577
Takeda, K., see Murata, K.	(75) 647
Takeuchi, A., see Azuma, H.	(74) 289
Takeuchi, K., M. Ichimura, E. Arai and Y. Yamazaki, SnS thin films fabricated by pulse	d and
normal electrochemical deposition	(75) 427
Takigawa, K., see Ishikawa, T.	(75) 529
Takigawa, K., N. Okada, N. Kuwabara, A. Kitamura and F. Yamamoto, Developmen performance test of smart power conditioner for value-added PV application	it and (75) 547
Takigawa, K., see Okada, N.	(75) 637
Takiguchi, H., see Komatsu, Y.	(74) 513
Takiguchi, H., see Yamamoto, H.	(74) 525
Tamura, J., K. Kurokawa and K. Otani, Estimation of hourly in-plane irradiation by minutely horizontal data	using
Tamura, Y., see Endo, E.	(75) 585
	(75) 751
Tanabe, T., see Hashimoto, A.	(75) 313
Tanaka, M., see Maruyama, E.	(74) 339
Tanaka, M., see Isomura, M.	(74) 519
Tanaka, M., see Murata, K.	(75) 647
Tanaka, M., see Yagi, Y.	(75) 655
Tanaka, S., see Hashimoto, A. Tanaka, T., T. Yamaguchi, T. Ohshima, H. Itoh, A. Wakahara and A. Yoshida, Effect of	(75) 313 Clion
implantation on electrical properties of CulnSe <sub>2</sub> thin films	(75) 109
Tanaka, T., T. Yamaguchi, A. Wakahara, A. Yoshida, R. Taniguchi, Y. Matsud M. Fujishiro, Effect of 8 MeV electron irradiation on electrical properties of CulnSc	a and
films	(75) 115
Tanaka, T., see Yagi, Y.	(75) 655
Tanaka, Y., see Kushiya, K.	(75) 171
Taniguchi, H., see Komatsu, Y.	(74) 513
Taniguchi, R., see Tanaka, T.	(75) 115
Tawada, Y., see Yamamoto, K.	(74) 449
Tazawa, M., see Xu, G.	(74) 267
Terakawa, A., see Maruyama, E.	(74) 339
Terukov, E.I., see Medvedkin, G.A.	(75) 127
Tichelaar, F.D., see Rath, J.K.	(74) 553
Tokita, Y., S. Chaisitsak, A. Yamada and M. Konagai, High-efficiency Cu(In,Ga)Se- th	
solar cells with a novel In(OH) <sub>5</sub> :Zn <sup>2</sup> buffer layer	(75) 9
Tokuda, S., see Hadi, H.	(75) 673
Tokunaga, S., see Fujita, R.	(75) 319
Topič, M., see Krč, J.	(74) 401
Torres, P., see Feitknecht, L.	(74) 539
Tortora, P., see Maddalena, P.	(75) 397
Toyama, T., see Nakamura, K.	(75) 185
Tsutsui, K., see Uematsu, T.	(75) 557
Tsuyoshi, A., see Muhida, R.	(75) 697
Tuladhar, S.M., see Katz, E.A.	(75) 421
Uchida, K., see Masuda, A.	(74) 373
Uda, H., H. Yonezawa, Y. Ohtsubo, M. Kosaka and H. Sonomura, Thin CdS films prepa	
metalorganic chemical vapor deposition	(75) 219
Uematsu, T., K. Tsutsui, Y. Yazawa, T. Warabisako, I. Araki, Y. Eguchi and T.	
Development of bifacial PV cells for new applications of flat-plate modules	(75) 557
	(74) 505

Ulvashin, A., M. Scherff, R. Hussein, M. Gao, R. Job and W.R. Fahrner, Comparison of	
multicrystalline silicon surfaces after wet chemical etching and hydrogen plasma treatment:	
	(74) 195
	(75) 767
	(75) 679
	(74) 255
Uraoka, Y., see Yamamoto, Y.	(75) 433
Uraoka, Y., see Nishioka, K.	(75) 665
	.74: 457
Vallat-Sauvain, E., see Meier, J.	(74) 457
van der Heide, A.S.H., J.H. Bultman, J. Hoornstra and A. Schönecker, Error diagnosis and	
optimisation of c-Si solar cell processing using contact resistances determined with the	(74) 43
Corescanner	(74) 43
Van Kerschaver, E., see Szlufcik, J.	(74) 155
Vetterl, O., see Brammer, T.	(74) 469
Vu, T.K., see Ohshita, Y.	(75) 405
Wada, T., M. Kondo and A. Matsuda, Improvement of $V_{\infty}$ using carbon added microcrystalline	
Si p-layer in microcrystalline Si solar cells	(74) 533
Wagner, H., see Lundszien, D.	(74) 365
Wagner, H., see Rech, B.	(74) 439
Wagner, H., see Brammer, T.	(74) 469
Wakahara, A., see Lee, HS.	(75) 57
Wakahara, A., see Tanaka, T.	(75) 109
Wakahara, A., see Tanaka, T.	(75) 115
Waki, M., see Yagi, Y.	(75) 655
Wakisaka, K., see Isomura, M.	(74) 519
Wang, A., see Altermatt, P.P.	(74) 165
Wang, Q.Z., see Geng, X.H.	(75) 489
Wang, Z.P., see Geng, X.H.	(75) 489
Warabisako, T., see Uematsu, T.	(75) 557
Watanabe, M., see Nishioka, K.	(75) 665
Wennerberg, J., see Kessler, J.	(75) 35
Wennerberg, J., J. Kessler and L. Stolt, Cu(In.Ga)Sey-based thin-film photovoltaic modules	
optimized for long-term performance	(75) 47
Wennerberg, J., see Brogren, M.	(75) 567
Werner, J.H., see Bergmann, R.B.	(74) 213
Widenborg, P., see Neuhaus, D.H.	(74) 225
Widenborg, P., DH. Neuhaus, P. Campbell, A.B. Sproul and A.G. Aberle, Back electrode	
formation for poly-Si thin film solar cells on glass having AIC-grown seeding layer	(74) 305
Willeke, G., see Goetzberger, A.	(74) 1
Willeke, G., see Biro, D.	(74) 35
Willeke, G., see Kieliba, T.	(74) 261
Woodall, J.M., see Li, G.	(75) 307
Xia, J., see Cho, EC.	(74) 147
Xu, G., P. Jin, K. Yoshimura and M. Tazawa, Optical confinement of the intermediate layer	
between Si and alumina substrate in thin film Si solar cells	(74) 267
Xue, J.M., see Geng, X.H.	(75) 489
Auc, owing set Ottigg Artis	(10) 10)
Yagi, Y., H. Kishi, R. Hagihara, T. Tanaka, S. Kozuma, T. Ishida, M. Waki, M. Tanaka and	
S. Kiyama, Diagnostic technology and an expert system for photovoltaic systems using the	
learning method	(75) 655

Yagiura, T., see Murata, K.	(75) 647
Yakubu, H., see Parretta, A.	(75) 497
Yamada, A., see Fujisaki, T.	(74) 331
Yamada, A., see Tokita, Y.	(75) 9
Yamada, T., see Sugiura, T.	(75) 767
Yamaguchi, A., K. Kurokawa, T. Uno and M. Takahashi, Reflection and absorption	775 X70
characteristics of electromagnetic waves for PV modules	(75) 679
Yamaguchi, M., see Azuma, H.	(74) 289
Yamaguchi, M., III-V compound multi-junction solar cells: present and future	(75) 261
Yamaguchi, M., see Khan, A.	(75) 271
Yamaguchi, M., A. Khan and N. Dharmarasu, Analysis for superior radiation resistance of	(75) 285
InP-based solar cells Yamaguchi, M., see Sun, G.C.	(75) 203
Yamaguchi, M., see Sun, G.C.	
	(75) 457
Yamaguchi, M., see Araki, K.	(75) 467
Yamaguchi, M., see Araki, K.	(75) 707
Yamaguchi, M., see Araki, K.	(75) 715
Yamaguchi, M., see Dharmarasu, N.	(75) 327
Yamaguchi, M., see Fahim, N.F.	(75) 411
Yamaguchi, M., see Narayanan, K.L.	(75) 345
Yamaguchi, M., see Ohshita, Y.	(75) 405
Yamaguchi, T., T. Kobata, S. Niiyama, T. Nakamura and A. Yoshida, Thin films of	
Cu(In.Ga)Se <sub>2</sub> and ordered vacancy compound prepared by thermal crystallization and	(70) 07
their photovoltaic applications	(75) 87
Yamaguchi, T., see Tanaka, T.	(75) 109
Yamaguchi, T., see Tanaka, T.	(75) 115
Yamaguchi, T., Y. Okamoto and M. Taberi, Investigation on abundant photovoltaic power	175 507
generated by 40 kW PV system in Wakayama National College of Technology Yamamoto, A., see Nakamura, S.	(75) 597
Yamamoto, A., see Nakamura, S.	(75) 81
	(75) 313
Yamamoto, A., M. Nakamura, A. Seki, E.L. Li, A. Hashimoto and S. Nakamura, Pyrite (FeS <sub>2</sub> ) thin films prepared by spray method using FeSO <sub>4</sub> and (NH <sub>4</sub> ) <sub>2</sub> S <sub>3</sub>	(75) 451
Yamamoto, F., see Takigawa, K.	(75) 547
Yamamoto, H., Y. Takaba, Y. Komatsu, MJ. Yang, T. Hayakawa, M. Shimizu and	(13) 341
H. Takiguchi, High-efficiency μc-Si/c-Si heterojunction solar cells	(74) 525
Yamamoto, K., M. Yoshimi, Y. Tawada, S. Fukuda, T. Sawada, T. Meguro, H. Takata,	(14) 323
T. Suezaki, Y. Koi, K. Hayashi, T. Suzuki, M. Ichikawa and A. Nakajima, Large area thin	
film Si module	(74) 449
Yamamoto, S., JS. Park, M. Takata, K. Sasaki and T. Hashimoto, Basic study on the	((4) 44)
prediction of solar irradiation and its application to photovoltaic-diesel hybrid generation	
system	(75) 577
Yamamoto, Y., see Ishikawa, Y.	(74) 255
Yamamoto, Y., Y. Ishikawa, T. Hatayama, Y. Uraoka and T. Fuyuki, Numerical analysis of bulk	(1/4) 255
diffusion length in thin-film c-Si solar cells	(75) 433
Yamanaka, S., see Kawamura, H.	(75) 613
Yamase, O., see Kushiya, K.	(75) 171
Yamase, O., see Nagoya, Y.	(75) 163
Yamase, O., see Sang, B.	(75) 179
Vamazaki, Y., see Takeuchi, K.	(75) 427
Yan, Z., see Li, G.	(75) 307
Yang, MJ., see Komatsu, Y.	(74) 513
Yang, MJ., see Yamamoto, H.	(74) 515
Yang, Q., see Li, G.	(75) 307
range Ver are Life Co.	(12) 201

Yano, K., see Komatsu, Y.	(74) 513
Yazawa, Y., see Muramatsu, SI.	(74) 275
Yazawa, Y., see Minagawa, Y.	(74) 283
Yazawa, Y., see Uematsu, T.	(75) 557
Yelundur, V., see Rohatgi, A.	(74) 117
Yi, J., see Parm, I.O.	(74) 97
Yi, JS., see Lee, JH.	(75) 227
Yi, JS., see Lee, JH.	(75) 235
Yonekura, N., see Kawamura, H.	(75) 613
Yonezawa, H., see Uda, H.	(75) 219
Yoo, YS., see Lee, JH.	(75) 227
Yoon, K.H., see Lee, J.C.	(74) 233
Yoon, K.H., see Ahn, J.H.	(74) 315
Yoon, K.H., see Lee, D.Y.	(75) 73
Yoon, K.H., see Song, H.K.	(75) 145
Yoshida, A., see Lee, HS.	(75) 57
Yoshida, A., see Yamaguchi, T.	(75) 87
Yoshida, A., see Tanaka, T.	(75) 109
Yoshida, A., see Tanaka, T.	(75) 115
Yoshida, K., see Komatsu, Y.	(74) 513
Yoshida, N., see Kunii, T.	(74) 415
Yoshimi, M., see Yamamoto, K.	(74) 449
Yoshimura, K., see Xu, G.	(74) 267
Yoshino, K., G. Ohkawara, H. Ueyama and H. Shirai, Fast deposition of microcrystalline silicon films with preferred (2 2 0) crystallographic texture using the high-density microwave plasma	(74) 505
Yoshioka, K., K. Koizumi and T. Saitoh, Simulation and fabrication of flat-plate concentrator	(14) 505
modules	(75) 373
Yoshioka, K., see Koizumi, K.	(75) 623
You, J., see Kang, J.	(74) 91
Yun, J.H., K.H. Kim, D.Y. Lee and B.T. Ahn, Back contact formation using Cu <sub>2</sub> Te as a	(/4) /1
Cu-doping source and as an electrode in CdTe solar cells	(75) 203
Zahedi, C., see Peter, K.	(74) 219
Zaidi, S.H., see Ruby, D.S.	(74) 133
Zeman, M., see Krč, J.	(74) 401
Zhang, S., see Li, G.	(75) 307
Zhao, J., see Altermatt, P.P.	(74) 165
Zhao, J., see Maddalena, P.	(75) 397
Zhao, J., see Parretta, A.	(75) 387
Zhao, J., see Parretta, A.	(75) 497
Zickermann, D., see Biro, D.	(74) 35
Zürcher, J., see Feitknecht, L.	(74) 539
Zweigart, S., see Eisele, W.	(75) 17
Zweigart, S., see Bär, M.	(75) 101



## Subject index to volumes 74 + 75

Absorption characteristic	(75) 679	Base fraction	(75) 439
Absorption coefficient	(74) 519	Baseline	(75) 35
AC modules	(75) 629	Bifacial cell	(75) 557
Active power control	(75) 529	Bifacial module	(75) 557
Added value	(75) 679	Binary selenide	(75) 73
AIC	(74) 305	Blistering	(75) 357
Al-induced crystallization (AIC)	(74) 323	B-H <sub>6</sub> doping	(74) 421
AlCl; vapor	(74) 315	B-O defect	(75) 405
All-silicon tandem cell	(74) 147	Boittom cell	(74) 479
Alternative buffer	(75) 1	Boron diffusion	(75) 557
Ammonia plasma activation	(75) 357	BSF layer	(75) 557
Amorphous carbon	(75) 411	Buffer free	(75) 101
Amorphous silicon solar cells	(74) 401	Buffer	(74) 365
Amorphous silicon (74) 339, 3	51, 393, 479	Building integration	(74) 127
Amorphous silicon	(75) 647	Building integration	(75) 567, 761
Analysis and evaluation	(75) 767	Buried contact	(74) 175
Annealing	(75) 285		(11) 115
Annual output	(75) 665		
Application	(75) 27	Cadmium sulfide	(75) 235
AR coating	(74) 147	Cadmium telluride	(75) 211, 235
Ar-dilution	(74) 407	Cadmium zinc sulfide	(75) 227
Array simulator	(75) 537	Carbon based materials	(75) 345
A-SiC,:H alloy films	379	Carbon	(74) 533
a-SiGe:H	(74) 365	Carbon	(75) 211
a-Si solar cells	(74) 387	Carrier lifetime	(74) 203
A-Si	(74) 439	Carrier removal effect	(75) 271
a-Si	(74) 513	Carrier removal rate	(75) 57
a-Si:H	(74) 365	Cat-CVD	(74) 247
a-Si:H:(Cl)	(74)429	Catalytic chemical vapor deposition	(74) 373
Atmospheric	(75) 211	Cathode heating	(74) 351
Atomic hydrogen	(74) 373	CBD CdS	(75) 193
Automatic voltage control unit	(75) 529	CBD-Zn(O,S,OH)x buffer	(75) 171
Avalanche breakdown voltage	(75) 613	CdS homojunction	(75) 253
		CdS	(75) 185, 219
		CdS/CdTe solar cell	(75) 193
B-doping	(74) 379	CdTe solar cell	(75) 203
Back contact	(74) 139	CdTe	(75) 185, 243
Back electrode	(74) 305	CdTe <sub>1</sub> ,S, mixed-crystal layer	(75) 185
Back surface field (BSF)	(74) 323	Ceramic substrates	(74) 261
Band-gap energy	(75) 285	Chalcopyrite crystals	(75) 135
Bandgap profiling	(74) 365	Chalcopyrite semiconductor	(75) 127
Barrier	(74) 139	Chalcopyrite	(75) 1
		17	(1.5)

Chamber cleaning	(7.1) 272	Calada (CIC)	
Chemical bath deposition	(74) 373 (75) 9, 17	CulnSe <sub>2</sub> (CIS)	(75) 57
Chemical vapor deposition	(74) 255	CuInSe <sub>2</sub>	(75) 109, 115
Chromatic aberration		Cumulative output	(75) 665
	(75) 467 (75) 27, 35, 47, 179	Cu-In precursor	(75) 81
CIGS-based submodules	(75) 163	Current measurements	(75) 397
CIGSS	(75) 1	Curve fitting CVD	(75) 457
CI doping	(75) 109		(74) 97
Clean energy revolution		CVD	(75) 1, 433
Clearness index	(74) 13	Cycloolefin copolymer	(74) 547
Closed-chamber plasma	(75) 585	Czochralski silicon	(74) 25
Coherent light	(74) 539	Czochralski silicon	(75) 351
Compensating centers	(74) 401	D	
Computer modeling	(75) 271	Damage coefficient	(75) 285
Computer modering  Computer simulation	(75) 489	Damp heating	(75) 127
	(75) 307	Dangling bonds	(75) 411
Concentrating solar module	(75) 603	DC magnetron sputtering	(75) 145
Concentrator cell	(75) 277	DC-DC converter	(75) 697
Concentrator PV	(75) 707, 715	Deep-level defects	(75) 327
Concentrator system	(75) 277	Defects	(75) 351
	261, 363, 467, 623	Degradation	(75) 319, 351
Conduction band offset	(75) 121	Deposition	(74) 233
Contact grid	(75) 381	Desert	(75) 507
Contact resistance	(74) 43, 91	Design parameter method	(75) 767
Contact	(74) 65	Design rule	(75) 439
Conversion efficiency	(75) 665	Device modeling	(74) 213
Cost reduction	(75) 729	Device simulation	(74) 479
Cost-effectiveness analysis	(75) 751	Diagnosis	(75) 613
Cost-efficiency	(75) 751	Diagnostic technology	(75) 655
CPC	(75) 277	Dichlorosilane	(74) 255
Criteria	(75) 655	Diesel	(75) 577
Crystalline silicon thin-film	(74) 295	Diffuse light	(75) 387, 497
Crystalline silicon	(74) 1, 155, 261	Diffusion length	(74) 57, 213
Crystalline thin film cells	(74) 1	Diffusion	(74) 139
Crystalline	(74) 289	Diffusion	(75) 227, 421
Crystallinity	(74) 255	Diode ideality factor	(75) 457, 467
Crystallinity	(75) 185	Diodes	(75) 243
Crystallites	(75) 243	Direct-coupled PV system	(75) 723
Crystallization	(74) 283, 315	Directional solidification	(74) 77
Crystallographic orientation	(74) 225	Distributed Bragg reflector (DBR)	(75) 299
CSS	(75) 211	Distribution system	(75) 637
Cu metallization	(74) 91	Distribution	(74) 183
Cu source	(75) 203	Dopant species	(75) 271
Cu(In,Ga)(S,Se) <sub>2</sub>	(75) 101	Doping	(75) 421
Cu(In,Ga)Se <sub>2</sub> thin film	(75) 65	2-D simulation	(74) 331
Cu(In, Ga)Se <sub>2</sub>	(75) 567	DX center	(75) 293
Cu(In.Ga)Se <sub>2</sub>	(75) 47, 73, 87	Dye sensitization	(75) 475
Cu(InGa)Se <sub>2</sub>	(75) 9, 35, 121		
Cu(InGa)Se2-based chalcopyrite		EBEP-CVD	(74) 561
material	(75) 171	Ecological sustainability	(75) 761
Cu <sub>2</sub> Te	(75) 203	Economic analysis	(75) 507
CuGaS <sub>2</sub>	(75) 93	Economic impact	(75) 519
Culn <sub>1</sub> ,Ga,Se <sub>2</sub>	(75) 145, 243	Economy	(75) 761
CuInS <sub>2</sub>	(75) 81	Edge recombination	(75) 381

EFG	(74) 57	GaInAsN layers	(75) 313
Electrical property	(75) 115	GaInP/GaInAs	(75) 277
Electrochemical deposition	(75) 427	Germanium	(74) 339
Electrode distance	(74) 351	Grain boundary (	74) 183, 331, 479
Electrodeposition	(75) 81	Grain boundary	(75) 489
Electroless plated Ni	(74) 65	Grid-connected PV system	(75) 529
Electromagnetic cast	(74) 203	Grid-connected PV systems	(75) 637
Electromagnetic wave	(75) 679	Grid-connected system	(75) 547
Electron localization	(75) 335	Gridded module	(75) 47
Electron paramagnetic resonance (EPR)	(75) 135	Growth temperature	(75) 235
Electron spin resonance (ESR)	(75) 411		(10) 200
Electroplated Cu	(74) 65	Hall measurement	(75) 451
Emitter-wrap-through	(74) 139	Heat Exchanger method	(74) 77
Encapsulants	(75) 387	Heat treatment	(75) 227
End of life performance	(75) 271	Heat-flow simulation	(74) 289
Energy pay-back	(75) 507	Heterojuncition solar cell	(74) 525
Environment effect	(75) 507	Heterojunction solar cells	(74) 195
Environmental issue	(74) 13	High conversion efficiency	(75) 261
Equivalent circuit	(75) 457	High deposition rate	(74) 407
Estimation model	(75) 585	High efficiency	(74) 25, 91
Etch pits	(74) 91	High power/weight ratio	(75) 307
3E-Trilemma	(74) 13	High rate	(74) 439
Evaluation method	(75) 687	High-density connection	
Evaluation	(75) 687	High-density plasma	(75) 637 (74) 505
Evaporation	(75) 73	High-pressure depletion	
Excimer laser	(74) 289	High-rate deposition	(74) 489
Experiment	(75) 679	High-rate growth	(74) 339
Experimental	(74) 469	Higher silane-related-reactive spe	(74) 489
Expert system	(75) 655	HK PV consortium	
Extreme radiation hardness	(75) 307	HK schools solar education prog	(75) 739
Extreme radiation naturess	(73) 307	Horizontal irradiance	ramme (75) 739 (75) 585
Fast deposition	(74) 505	Hot-wire chemical vapor deposit	
Fe-B pairs	(74) 203	Hot-wire CVD	(74) 233, 379
Feedstock	(74) 219	Hybrid junction	(74) 513
FeSo <sub>1</sub>	(75) 451	Hybrid PV system	(75) 781
Field effect	(75) 335	Hybrid solar cell	(74) 513, 525
Field test	(75) 687	Hybrid system	(75) 577
Fire resistance	(75) 647	Hydrogen energy	(75) 697
Firing	(74) 43	Hydrogen passivation	(74) 117, 203
Fixed charges	(75) 335	Hydrogen radical	(74) 379
Flat-plate concentrator	(75) 373	Hydrogen	(74) 57
Flat-plate module	(75) 557	Hydrogen	(75) 357
Flexible solar cell	(75) 65	Hydrogenated amorphous silicor	
Fluence	(75) 319	Hydrogenated microcrystalline	
Flux distribution	(75) 467	films	(74) 415
FTIR-RAS	(74) 421	Hydrogenated microcrystalline s	
Fullerene	(75) 421	Hydrogenation	(74) 195, 225
Fuzzy logic controller	(75) 723	Hydrogenation	(74) 173, 223
r uzzy togic controller	(13) 123	Ideality factor	(74) 165
Ga doping	(74) 25	III-V multi-junction cell	(74) 165
Ga-doping Ga-doped ZnO	(75) 163	III-V multi-junction cells	(75) 467
Ga-doped Zho GaAs	(75) 277	ILGAR (ion layer gas reaction)	(75) 707 (75) 101
GaAsP	(75) 277	Implemented PV system	
Od/tal	(12) =99	implemented r v system	(75) 723

In(OH)::Zn2 **	(75) 9	Low temperature	(74) 497
In-plane irradiation	(75) 585	LP-CVD ZnO	(74) 457
Incubation layers	(74) 539	LPE	(74) 219
Indium doping	(75) 227	Luminescence	(75) 363
Indium-tin oxide	(75) 193		
InGaAs	(75) 299	Maintenance	(75) 655
InGaP	(75) 261, 261	Majority carrier	(74) 57
Ingap	(75) 293	Manufacturing and processing	(74) 35, 155
InP solar cell	(75) 307	Manufacturing initiative	(75) 519
InP-related materials	(75) 285	Manufacturing	(74) 127
Insulating layer	(75) 65	Manufacturing	(75) 27
Integrating sphere	(75) 397	Mass-production apparatus	(74) 373
Integrating spheres	(75) 387, 497	Maximum current controller	(75) 697
Inter-layer	(74) 513	Maximum power point (MPP)	(75) 673
Interdigitated structure	(75) 439	11	neking
Interface	(75) 185	(MPPT)	(75) 697
Interfacial Al oxide	(74) 323	Maximum-power point tracking	(75) 723
Internal spectral response	(75) 397	me-Si	(74) 513
Intrinsic ZnO	(75) 163	μc-Si	(4) 439, 489, 525
1-V characteristics	(74) 449	μc-Si:H solar cell	(74) 497
I-V characteristics	(75) 613		79, 421, 505, 539
I-V curve	(75) 537	Mechanical texturisation	(74) 175
Inverter conversion efficiency	(75) 655	Metallisation	(74) 43
Inverter	(75) 537	Metallization	(74) 43
Inverters	(75) 629	Metallurgical grade silicon	
Ion implantation	(75) 109, 345, 411	Metalorganic chemical vapor depo	(74) 77
Ion-assisted deposition	(74) 225	Metastability	
Iron pyrite (FeS-)	(75) 451	Meteorological data	(75) 293
Iron	(74) 183	MIC	(75) 623
Irradiance	(75) 537, 603	Microcrystalline Si solar cell	(74) 275
Irradiation	(75) 665	Microcrystalline Si	(74) 479
Irradiation-induced defect	(75) 57	* **	(74) 469
	(13) 31	Microcrystalline (7	4) 393, 533, 547
Japanese monitoring program	(75) 767	Microcrystallization	(74) 553
Job creation	(75) 519	Microdefects	(74) 407
	(73) 317	Microwave detected photo-conduc	(75) 127
Laser annealing	(74) 289	decay	
Laser crystallization	(74) 295	MILC	(74) 203
Laser-induced epitaxy	(74) 295	Mini-modules	(74) 283
Lattice constant	(75) 93	Minority carrier diffusion length	(75) 35
LBIC	(75) 433	Minority carrier diffusion length	(75) 433
Learning method	(75) 655	Minutely measured irradiance	(74) 57
Lifetime	(74) 57, 183	MIS contacts	(75) 585
Light degradation	(75) 405	Mobility	(74) 25
Light scattering	(74) 401, 469	Mobility	(74) 57
Light soaking effect	(75) 9	MOCVD	(75) 93
	213, 439, 469, 513		(75) 179
Light-trapping type	(75) 623	Modelling Modula design	(75) 363
Light-trapping			(75) 35, 47, 567
Liquid phase epitaxy	(74) 457	Module temperature	(75) 597, 665
Localized state	(74) 219	Module	(75) 647
Losses	(74) 415	Monitoring	(75) 687
Low earth orbit	(75) 687	Monolithic thin-film solar module	(75) 171
with the	(75) 319	Monthly output energy	(75) 781

Moroeco	(75) 519	Photoluminescence (PL)	(75) 135
Morphology	(75) 81, 427	Photons	(75) 243
MPPT	(75) 537	Photothermal spectroscopy	(74) 413
Multi-junction solar cells	(75) 261	Photovoltaic module	(75) 679
Multi-quantum well (MQW)	(75) 299	Photovoltaic power	(75) 593
Multicrystalline silicon cells	(74) 133	Photovoltaic system	(75) 537, 655, 687
Multicrystalline silicon solar cell	(74) 175	Photovoltaic systems	(75) 76
Multicrystalline silicon	(74) 107, 117,		577, 665, 687, 69
	183, 195	Photovoltaics	(74) 7
Multicrystalline (7	4) 57, 127, 139	Photovoltaics	(75) 519
Multilayer	(74) 357	PI controller	(75) 72:
Multiple quantum wells	(74) 147	Piston pump	(75) 67.
		Plasma chemical deposition	(74) 44
New materials and concepts	(74) 1	Plasma CVD	(74) 519
New sunshine project	(74) 13	Plasma enhanced chemical v	
(New-) sunshine program	(75) 751	position (PE CVD)	(74) 29:
(NH <sub>4</sub> )-S <sub>2</sub>	(75) 451	Plasma etching	(74) 13
Ni Ni	(74) 275, 283	Plasma texturing	(74) 13.
Normal direct irradiance (NDI)	(75) 715	Plasma	(74) 9
. Territoria di certi internativa (internativa di certi internativa di c	(10) 110	Plasma-enhanced chemical v	
Oblique evaporation	(74) 25	position	(74) 393, 489
OECO technology	(74) 25	p-i-n-type	(74) 42
Ohmic contact	(75) 211	p-n junction	(74) 16.
One-axis tracking	(75) 277	Point defects and defect pairs	(75) 13
Operation characteristic	(75) 529	Point defects and defect pairs	(75) 12
Operation time	(75) 665	Policy	(75) 76
Optical absorption	(74) 415	Poly Si and c-Si-based PV arra	
Optical confinement structure	(75) 489	mance	(75) 78
Optical confinement	(74) 267	Poly-Si thin film	(74) 31
Optical emission spectroscopy OES		Poly-Si	(74) 247, 30
Optical losses	(75) 397, 497	Poly-silicon	(75) 48
Optical modelling	(74) 401	Polyerystalline silicon	(74) 255, 275, 33
Optical optimization	(74) 267	Polycrystalline thin film	(75) 21
Optics	(74) 469	Polycrystalline Polycrystalline	(74) 23
Optimal refractive index	(74) 97	Polycrystalline	(75) 9
Optimum design	(74) 479	Polymer	
Ordered vacancy compound		Power	(74) 54
Out-diffusion	(75) 87	Prediction	(75) 31
	(74) 71		(75) 57
Output power	(75) 603	Process control	(74) 4
Oxygen-related donor	(74) 497	Process control	(75) 17
.+	170, 202	Process development	(75) 2
p contact	(75) 203	Promotion program	(75) 72
p-layer	(74) 429, 533	Proton irradiation	(75) 5
p-type Cu-doped CdS	(75) 253	Pulse	(75) 42
Parabolic concentrators	(75) 567	PV HKU research group	(75) 73
Parabolic trough	(75) 277	PV industry	(75) 72
Parameter analysis method	(75) 687	PV market	(75) 72
PECVD SIN	(75) 357	PV module	(75) 61
	4) 247, 357, 439	PV modules	(75) 387, 49
Performance index	(75) 373	PV system	(74) 1
Phase transition	(74) 393	PV system	(75) 507, 59
Phosphorous and boron gettering	(74) 203	PV systems	(75) 629, 72
Photo-EPR	(75) 135	PV tile	(75) 64

Quantum dots (QDs)	(75) 363	Shading losses	(75) 381
Quantum efficiency	(75) 1	Shadow	(75) 613
QW	(74) 147	Shadowing fraction	(75) 439
		Sheet substrate	(74) 513
R&D planning	(75) 751	Short-circuit current	(75) 603
Radiation damage	(75) 115, 271, 285	Si film	(74) 283
Radiation	(75) 319, 327	Si nitride	(74) 25
Radiative transfer	(75) 363	Si solar cells	(74) 267
Raman characterization	(75) 313	Si solar cells	
Raman spectroscopy	(74) 393, 519	Si Somi Cens	(75) 271
Rapid thermal process	(74) 71	SiCla	(74) 213
Rapid thermal processing	(74) 35, 51	SiH,Cl,	(74) 421
Ray tracing	(75) 623	Silicon carbide	(74) 421, 429
Re-absorption	(75) 363	Silicon film	(74) 561
Reactive power and harmon	ics compen-	Silicon films	(74) 289
sation	(75) 547	Silicon germanium	(74) 233
Reactive power control	(75) 529, 637	Silicon nitride films	(74) 357, 553
Rear reflector	(75) 373	Silicon nitride	(74) 97
Recombination loss	(74) 479	Silicon solar cells	(74) 117
Red shift	(75) 363	Silicon thin-film solar cell	(74) 35, 133
Refining	(74) 77	Silicon Silicon	( - 1/ = 12
Reflectance	(75) 497	Silicon	(74) 51, 57, 91, 127,
Reflection coefficient	(75) 679	Ciliana	139, 147, 219, 439
Reflector	(75) 603	Silicon germanium SIMS	(74) 519
Renewable energy	(74) 13	Simulation	(74) 183
Reproducibility	(75) 171		(74) 165
Residential PV systems	(75) 767	Simulation	(75) 679
Resistivity		Single phase	(75) 93
Resonant photothermal bending spec-		Single-crystalline Si (75) 433 Smoothing fluctuation of PV output	
troscopy	(74) 415		
RGS	(74) 413	and demand load	(75) 547
RHEED		Smoothing	(75) 547
Ribbon	(74) 525 (74) 57	SnS SOI	(75) 427
RIE	(74) 247		(75) 439
Roller-printing	(74) 247	Solar activity	(75) 319
Roofing material	(75) 647	Solar cell efficiency prediction (74) 1 Solar cell (74) 51 65 117 139 183	
Rotational solidification met	thod (74) 513	Solar cell (7	(4) 51, 65, 117, 139, 183.
Rough interfaces	(74) 313		289, 305, 331, 449, 489,
2	(74) 401	6.1	519, 533, 547, 553
Scattered component ratio	(75) 585	Solar cell (7	(5) 57, 87, 109, 115, 293,
Scattered sun light	(75) 781	S-1	351, 665
School BEMS	(75) 739	Solar cells	(74) 25, 91, 127, 155,
School BIPV	(75) 739		213, 233, 339, 373,
Screen printing	(74) 35, 43, 71, 139	6.1 11	469, 539
Screen-printing		Solar cells (75	) 17, 227, 235, 345, 397.
Second stage concentrator	(74) 51	C 1	421, 647
Seed layer	(75) 277	Solar generator efficiency (75) 673	
Segregation	(74) 323 (74) 183	Solar grade silicon	(74) 77
Selective emitter		Solar irradiation	(75) 577
Selenization	(74) 71 (75) 145	Solar module	(74) 449
Selenization sulfurization	(75) 171	Solar panel	(75) 603
Series resistance	(74) 43	Solar radiation	(75) 597
Series resistance	(75) 457	Sol-gel	(75) 481
	(73) 437	Solid polymer electrolysis	(SPE) (75) 697

Space solar cells	(75) 285	Thin film solar cells	(74) 365
Spatial standing wave method	(75) 679	Thin film solar cells	(75) 73
SPE characteristics	(75) 697	Thin film (74) 219, 267, 275, 305,	
Spectrum matching	(75) 707	331, 469, 519	
Spectrum	(75) 715	Thin film (75) 109, 115, 307, 489	
Spoke antenna	(74) 505	Thin films (75) 243, 421	
Spray method	(75) 451	Thin-film photovoltaic cells (75) 253	
Sputtering	(74) 439	Thin-film silicon (74) 225, 457, 53	
Stability	(75) 47	Thin-film solar cell	(75) 433
Stacked solar cells	(75) 489	Thin-film solar cells (74) 26	
Stacked structure	(74) 519	Thin-film solar cells (75) 81	
Strain balance	(75) 299	Thin-film solar module (75) 27	
String ribbon	(74) 57	Tin isopropoxide (75) 481	
Structural changes	(75) 313	Tin oxide film (75) 481	
Submodules	(75) 179	Tio <sub>2</sub> solar cell (75) 475	
Substrate	(74) 469	Transmission electron microscopy (75) 17	
Sulfurization	(75) 451	Transmittance (75) 387	
Superlattice	(74) 147	Transparent conducting oxide (74) 449	
Superstrate	(74) 469	Transparent electric window (75) 475	
Suppression of darkening	(74) 429	Transparent (74) 12	
Surface damage	(75) 357	Triethanolamine (75) 481	
Surface passivation	(74) 147	Tunnel junction (75) 261	
Surface passivation	(75) 335	Twin defects (74) 22	
Surface photo-voltage	(74) 203	Two-dimensional device simulator (75)	
Surface recombination velocity	(74) 147	Two-step method (75) 145	
Surface treatment	(75) 193		
Surface	(74) 165	Up-scaling (74) 439	
System efficiency.	(75) 673	Upgraded metallurgical (74) 21	
System performance ratio	(75) 655		
		Vacuum evaporation	(75) 235
Tandem cell	(74) 439	Value-added PV application (75) 54'	
Tandem solar cell	(74) 479	Variable incidence angle (75) 397	
Tandem	(74) 339	VHF-GD (74) 457	
TCO	(74) 439, 469	VHFGD (74) 539	
TCO/glass.	(75) 387	VI/II molar ratio (75) 219	
Technological progress model	(75) 751	$V_{oc}$ (74) 533	
Technology transfer	(74) 107	Voltage regulation method (75) 637	
Technology transfer	(75) 519		
Temperature coefficient	(75) 665	WEL (Window Extension Layer) (7	
Temperature dependence of cell effi-		Wet chemical etching (74) 195	
ciency	(75) 781	Wide gap widow layer material of solar	
Texture	(75) 387	cell	(74) 379
Texturisation	(74) 127	Wide optical gap	(74) 429
The path of the sun	(75) 781	Window layer (75) 121, 163	
The SV method	(75) 687	Window (75) 179	
Thermal annealing	(75) 411		
Thermal crystallization	(75) 87	X-ray diffraction (75) 427	
Thermodynamics	(75) 363	X-ray photoelectron spectroscopy (75) 17	
Thin cell	(75) 439		
Thin film materials	(74) 1	Zinc oxide (74) 439	
Thin film silicon	(74) 561	Zinc treatment (75) 17	
Thin film solar cell	(74) 255, 439	Zircon (74) 261	
Thin film solar cell	(75) 1, 101, 127	Zn-doping (75) 9	

Zn<sub>1</sub> ,Mg,O ZnO window ZnO (75) 121 ZnO:Al films (75) 171 ZnO:B 469, 513 ZnSe

(74) 387 (75) 179 (75) 1, 17

ZnO (74) 469, 513 ZnO (75) 101

(75) 101 Zone-melting recrystallization

(74) 261

